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## *Technical Memorandum 33-523*

### *Volume III*

# *Tracking and Data System Support for the Mariner Mars 1971 Mission*

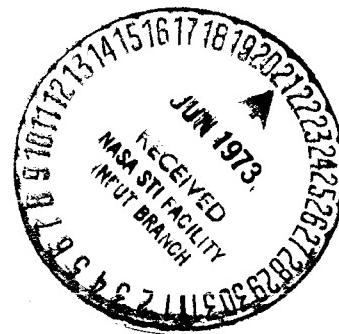
## *Orbit Insertion Through End of Primary Mission*

*P. W. Barnum*

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*L. B. Kelly*



JET PROPULSION LABORATORY  
CALIFORNIA INSTITUTE OF TECHNOLOGY  
PASADENA, CALIFORNIA

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#### PREFACE

The work described in this report was performed by the Tracking and Data Acquisition organizations of the Jet Propulsion Laboratory, Air Force Eastern Test Range, Manned Space Flight Network, and the NASA Communications Network of Goddard Space Flight Center. This volume covers the Tracking and Data System activities in support of the Mariner Mars 1971 Project for orbital operations, which includes the period from orbit insertion to end of primary mission. Tracking and Data System flight support, performance evaluation, and configuration are described.

#### ACKNOWLEDGMENT

The authors acknowledge the considerable assistance of the NASA Communications Network of the Goddard Space Flight Center and the Deep Space Network (DSN) of the Jet Propulsion Laboratory in providing tracking and data support. Information regarding the DSN is based on material generated by the DSN Interface Team for the Mariner Mars 1971 Project, the DSN Operations Staff, and the monthly DSN Operations Reports. The following persons made significant contributions:

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## ABSTRACT

This volume of the Tracking and Data System (TDS) Support for the Mariner Mars 1971 Mission final report contains the deep space tracking and data acquisition activities in support of orbital operations, which include the period from orbit insertion (November 14, 1971) to end of primary mission (April 1, 1972). During this period (February 12, 1972), a major NASA objective was accomplished: completion of the 180th revolution and 90th day of data gathering with the spacecraft about the planet Mars. Included are presentations of the TDS flight support pass chronology data for each of the Deep Space Stations used, and performance evaluation for the Deep Space Network Telemetry, Tracking, Command, and Monitor Systems. With the loss of Mariner 8 at launch, Mariner 9 assumed the mission plan of Mariner 8, which included the TV mapping cycles and a 12-hr orbital period. The mission plan was modified as a result of a severe dust storm on the surface of Mars, which delayed the start of the TV mapping cycles until January 3, 1972. Thus, the end of primary mission date was extended to April 1, 1972 to complete the TV mapping cycles.

## I. INTRODUCTION

### A. Purpose

This document, Volume III of the Tracking and Data System (TDS) Support for the Mariner Mars 1971 (MM'71) Mission, summarizes deep space tracking and data acquisition activities in support of orbital operations of the Mariner Mars 1971 Mission from orbit insertion (November 14, 1971) to end of primary mission (April 1, 1972). With the previously completed Volumes I and II, together with Volume IV, this report constitutes the complete history of TDS activities supporting MM'71.

### B. Scope

Volume III contains a description of TDS flight support of orbital operations from orbit insertion to end of primary mission (Section III). TDS requirements (Section I), TDS plan and configuration (Section II), and TDS performance and evaluation (Section III) are also included.

Volume I covers TDS support of prelaunch testing and training for both near-Earth and deep space phases (Section IV) and TDS flight support from launch operations through first trajectory correction maneuver (Section V). TDS requirements (Section II), TDS plan and configuration (Section III), and performance evaluation (Section V) are also included.

Volume II describes TDS flight support from the first trajectory correction maneuver through the end of the cruise period and orbit insertion (Section III), plus TDS support of preorbital testing and training (Section IV). TDS requirements (Section I), TDS plan and configuration (Section II), and TDS performance and evaluation (Section III) are also included.

Volume IV will describe the MM'71 Extended Mission TDS support.

### C. TDA Function and Organization

The TDA function and organization is presented in the Introduction, Section I, Volume I, and is therefore not covered in this report.

### D. TDS Organization

The TDS organization, as described in Volume I, has undergone no changes or additions.

### E. TDS Requirements on Project

The DSN required the Project to supply spacecraft/DSS telecommunications interface information in accordance with JPL Document 610-74, Volume II of Operations Plan. The Project was required to supply standards and limits for the DSN Tracking, Telemetry, and Command Systems in accordance with JPL Document 610-75, Revision A, Volume IIB of Operations Plan. The TDS required the Project to conform with NASA Directive 2570.1A, which required all planetary projects to provide their spacecraft with a capability to turn off the RF carrier by command at the completion of the mission.

### F. Mission Operations

Mission Operations for MM'71 are presented in Section I of Volume I.

### G. Mission Plan

1. General. The MM'71 Mission Plan is the same as that presented in Volume II, except for the modification of Mission Orbit Operations with the Mariner 9 spacecraft as a result of a severe dust storm on the surface of Mars. This dust storm covered most of the surface features of Mars and did not subside sufficiently to start the TV mapping cycles until January 3, 1972. Three complete mapping cycles (TV plus other science)

of about 20 days each, and ending March 1, 1972, plus a "Bi-Cycle" Plan ending April 1, 1972, were incorporated into the Mission Plan. These mapping cycles are covered in detail in Project Document PD 610-16, MP-71-4-200A (Amendment 3), the Bi-Cycle Plan, and the Extended Mission, in addition to Reconnaissance I and II Mission Plan.

The guidelines and profiles for Mission Orbit Operations are as follows:

- (1) Standard Mission Orbit Operations (Volume II), orbits 0-23, 11/14/71 to 11/26/71.
- (2) Recon I Cycle Plan, orbits 24-63, 11/26/71 to 12/16/71.
- (3) Recon II Cycle Plan, orbits 64-99, 12/16/71 to 1/3/72.
- (4) Cycle I Mapping, orbits 100-138, 1/3/72 to 1/22/72.
- (5) Cycle II Mapping, orbits 139-177, 1/22/72 to 2/10/72.
- (6) Cycle III Mapping, orbits 178-216, 2/10/72 to 3/1/72.
- (7) Bi-Cycle Plan, orbits 217-278, 3/1/72 to 4/2/72.
- (8) Extended Mission Plan, 2/12/72 to 12/1/72.

2. Standard Mission Orbit Operations. The guidelines and profile for the Standard Mission Orbit Operations, covered in Volume II, include orbits 0 through 23. A severe dust storm covering most of the surface of Mars was encountered from the start of the TV mapping. This dust storm blotted out most of the surface features and prevented satisfactory TV mapping sequences from being obtained; all other science data were not affected. This condition existed until January 2, 1972, thus causing a replanning of the mapping cycles, including two reconnaissance cycles, through each TV mapping cycle, and one bi-cycle plan.

#### H. Reconnaissance I Mission Plan Guidelines

The Recon I Mission Plan was outlined as follows:

- (1) Assumes a 30-picture budget.
- (2) The sequences do not change as far as timing is concerned and very little as far as pointing is concerned, except for the targeted B's (tetrads) and limb TV.
- (3) The capability will exist to shutter single B frames at almost any time by direct commands (DCs). Slews for such extra frames (for satellites) shall be QC's. All such frames shall come out of the mapping budgets. Mapping will automatically terminate at end of tape.
- (4) The first revolutions that this plan could be implemented in are revolutions 24 and 25.

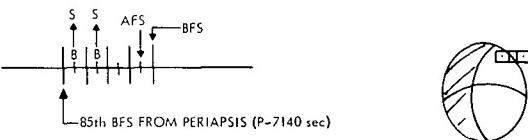
- (5) One CC&S load might run several days without updates.
- (6) The only variable pointing shall be the starting position of:
  - (a) Three IRR terminator scans (2 positions)
  - (b) Tetrad 1
  - (c) Tetrad 2
  - (d) Global TV
  - (e) Limb TV
  - (f) Polar or VSF TV
  - (g) UVS low-rate target
  - (h) UVS high-rate target
  - (i) UVS limb scan
  - (j) IRR limb scan
  - (k) Mapping

Recon I mission profile is shown in Fig. 1.

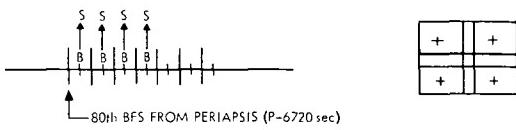
#### I. Nominal Plan for Zenith Revolutions

The plan for zenith revolutions follows:

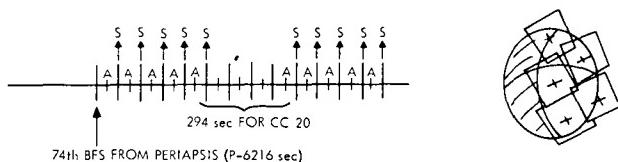
- (1) Slew from reference position (KA 193.0, CA 96.2) to KA&CA of limb TV. Slew begins at 185 min before periapsis (11,100 sec).
- (2) Limb TV - Two B frames, overlapping, on limb:



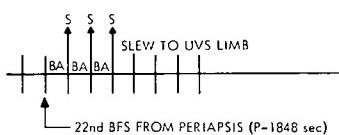
- (3) Tetrad 1 - Overlapping of four B frames on a target (using a standard slew pattern):



- (4) Global TV - Mosaic the lighted disk with five A frames in two colors:



- (5) Tetrad 2 - Same as Tetrad 1, begins on the fifty-seventh BFS from periapsis (P-4788 sec).
- (6) UVS and IRIS pressure mapping as normal.
- (7) Slew to polar TV or VSF position at the twenty-seventh BFS from periapsis (P-2268 sec).
- (8) Polar TV or VSF photography - Take three BA pairs in a standard pattern for both polar and VSF:

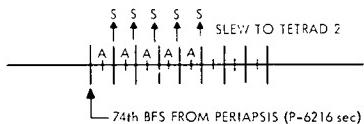


- (9) UVS limb experiment as normal.
- (10) Begin slew to mapping position at the thirteenth BFS from periapsis (P-1092 sec).
- (11) Map - Take two BA pairs or map to end of tape recorder beginning at the tenth BFS from periapsis (P-840 sec). Mapping is done at a fixed CA&KA.
- (12) Begin slew to UVS high-rate target at  $P_Z + 12 \text{ min}$  (Lyman- $\alpha 1$ ).
- (13) Begin slew to UVS low-rate target at  $P_Z + 275 \text{ min}$  (Lyman- $\alpha 2$ ).

#### J. Nominal Plan for Nadir Revolutions

The plan for nadir revolutions follows:

- (1) Slew from Lyman- $\alpha 2$  (low-rate) to CA&KA of first IRR terminator swath. Slew begins at 61 min from apoapsis.
- (2) Slew to second IRR terminator swath.
- (3) Slew to third IRR terminator swath.
- (4) Limb TV - Same as zenith pass, same timing.
- (5) Tetrad 1 - Same as zenith pass, same timing.
- (6) Global TV - Mosaic lighted disk with five A frames in only one color.



- (7) Tetrad 2 - Same as on zenith pass, begins on sixty-sixth BFS from periapsis (P-5544 sec).
- (8) Slew to begin IRR limb scan at end of tetrad.

- (9) Begin slew to polar or VSF TV position at the twenty-seventh BFS from periapsis (P-2268 sec).
- (10) Polar TV or VSF TV - Same as zenith revolution, same time. When completed begin slew to mapping position. Standard pattern for both polar and VSF TV.
- (11) Map - Take at least four BA pairs + 1 B. Begin same time as on zenith pass.
- (12) Begin slew to reference position (CA 96.2, KA 193.0) at  $P_N + 12 \text{ min}$ .

#### K. Reconnaissance II Mission Plan Guidelines

Recon II Mission Plan follows:

- (1) Assumes 32-picture per revolution tape recorder budget.
- (2) The basic timing and structure of individual links and overall sequences will remain constant from revolution to revolution.
- (3) Optimization of the pointing of certain links will be accomplished periodically. Links that will be considered for such optimization are:
  - (a) Global TV (N and Z)
  - (b) UVS limb scans (Z)
  - (c) UVS/IRR/IRIS morning spectral mapping (Z)
  - (d) IRR morning terminator scans (N)
  - (e) UVS/IRR/IRIS evening spectral mapping (N and Z)
  - (f) TV mapping (N and Z)
- (4) Links that may be considered retargetable on a daily basis are:
  - (a) Tetrads 1 and 2 (Z)
  - (b) Triads 1 and 2 (N)
  - (c) Dyad (N)
  - (d) Sextad (N and Z)
  - (e) Lyman- $\alpha 1$  (high-rate)
  - (f) Lyman- $\alpha 2$  (low-rate)
- (5) Satellite astronomy will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shutting off of single B frames or single BA pairs. All slews for such satellite photography will be CC&S-controlled. Satellite frames will automatically reduce the mapping budget by an amount equal to the number of satellite frames in a revolution.
- (6) One CC&S load might run several days without an update.
- (7) Planning for a two-revolution sequence will be completed seven days before the

- execution of the sequence by the spacecraft; however, changes will be considered up to three days before execution.
- (8) The first revolutions that this plan could be implemented in are revolutions 64 and 65.

Recon II mission profile is shown in Fig. 2.

#### L. Cycle I Mission Plan Guidelines

Cycle I Mission Plan follows:

- (1) Assumes 32-picture per revolution tape recorder budget.
- (2) The basic timing and structure of individual links and overall sequences will remain constant from revolution to revolution.
- (3) Optimization of the pointing of certain links will be accomplished periodically. Links that will be considered for such optimization are:
  - (a) Global TV (N and Z)
  - (b) UVS limb scans (Z)
  - (c) UVS/IRR/IRIS morning spectral mapping (Z)
  - (d) IRR morning terminator scans (N)
  - (e) UVS/IRR/IRIS evening spectral mapping (N and Z)
  - (f) TV mapping (N and Z)
- (4) Links that may be considered retargetable on a daily basis are:
  - (a) Pentad (Z)
  - (b) Tetrad (N and Z)
  - (c) Dyads (N)
  - (d) UVS targets
  - (e) TLR
- (5) Satellite astronomy will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shuttering of single B frames or single BA pairs. All slews for such satellite photography will be CC&S-controlled. Satellite frames will automatically reduce the northern hemisphere reconnaissance budget by an amount equal to the number of satellite frames in a revolution.
- (6) Planning for a two-revolution sequence will be completed seven days before the execution of the sequence by the spacecraft; however, changes will be considered up to three days before execution.

- (7) The first revolutions that this plan could be implemented in are revolutions 100 and 101.

Cycle I mission profile is shown in Fig. 3.

#### M. Cycle II Mission Plan Guidelines

Cycle II Mission Plan follows:

- (1) Assumes 32-picture per revolution tape recorder budget with 8-kbps playback to supplement 16-kbps playback of both revolutions. Playback ends at P-60 min.
- (2) The basic timing and structure of individual links and overall sequences will remain constant from revolution to revolution (at least until revolution 142), except for slews identified as floating slews in the detailed orbital sequence plan.
- (3) Optimization of the pointing of certain links will be accomplished periodically. Links that will be considered for such optimization are:
  - (a) UVS limb scans (Z)
  - (b) UVS/IRR/IRIS morning spectral mapping (Z)
  - (c) IRR morning terminator scans (N)
  - (d) UVS/IRR/IRIS evening spectral mapping (N and Z)
  - (e) TV mapping (N and Z)
  - (f) Geodesy (N and Z)
- (4) Links that may be considered retargetable on a daily basis are:
  - (a) Single B frames (SB)
  - (b) Triads (N and Z)
  - (c) UVS targets
- (5) Satellite astronomy will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shuttering of single B frames or single BA pairs. All slews for such satellite photography will be CC&S-controlled. Satellite frames will automatically reduce the northern hemisphere reconnaissance budget by an amount equal to the number of satellite frames in a revolution.
- (6) Targeting for SB 1 will periodically be chosen to optimize a UVS limb scan on zenith revolutions.
- (7) Targeting for SB 2 and 3 will be chosen in conjunction with UVPM scans on the zenith revolution and IRR scans on the nadir passes.

- (8) Early tape recorder start capability will be exercised on the nadir pass after the Map 2 sequence.
- (9) Late slew (B-frame shutter + 48 sec) capability will be exercised only on SB 1 on nadir and zenith passes.
- (10) Planning for a two-revolution sequence will be completed seven days before the execution of the sequence by the space-craft; however, changes will be considered up to three days before execution.
- (11) The first revolutions that this plan could be implemented in are revolutions 139 and 140. Since the mapping cycle is only 39 revolutions long, the last revolution of Cycle II will be 177.

Cycle II mission profile is shown in Fig. 4.

#### N. Cycle III Mission Plan Guidelines

- (1) This plan assumes a variable picture budget due to the lowering telecommunications margins that occur throughout this cycle. The cycle begins with over 30 pictures per revolution and ends with about 13 or 14 pictures played back per revolution. Two methods to account for the diminishing picture return were assumed. This plan first allowed for one major CC&S update to occur sometime during the cycle to remove selected frames. Secondly, it was assumed that adjustment of the time of playback and position of the recorder for the start of playback could be accomplished on a daily basis to bias which pictures are to be played back. This plan also assumes that playbacks end at the time the planet comes into view.
- (2) The basic timing and structure of the individual links and overall sequences will remain constant from revolution to revolution before and after the one major CC&S update.
- (3) Optimization of the pointing of the TV mapping link will be accomplished periodically.
- (4) Links that may be considered retargetable on a daily basis are:
  - (a) Tetrads and dyads (N and Z)
  - (b) T.E.C. (Z)
  - (c) UVS limb scans (Z)
  - (d) UVS/IRR/IRIS spectral scans (N and Z)

- (e) UVS Lyman- $\alpha$  targets
- (5) Satellite astronomy or other target photography will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shuttering of single B frames or single BA pairs. All slews for such satellite and additional target photography will be CC&S-controlled. These frames will automatically reduce the northern hemisphere reconnaissance budget by an amount equal to the number of such frames in a revolution.
- (6) Early tape recorder start capability for A frames will exist for the entire nadir and zenith revolution sequences; however, this capability will be exercised at the beginning of the cycle only on the nadir pass.
- (7) While this plan does not specifically include a floating dyad, this link is desirable for the last part of Cycle III. A floating dyad, two B frames on a single target, would replace Dyad 1 and Tetrad 1 on the zenith pass and Dyad 1 and Dyad 2 on the nadir pass. It is assumed that this floating dyad would be fixed in either one of two possible times on a daily basis.
- (8) Planning for a two-revolution sequence will be completed seven days before the execution of the sequence by the space-craft; however, changes will be considered up to three days before execution.
- (9) The first revolutions that this plan could be implemented in are revolutions 178 and 179. Since the mapping cycle is only 39 revolutions long, the last revolution of Cycle III will be 216.

Cycle III playback profile is shown in Fig. 5. Cycle IIIa profile (beginning) is shown in Fig. 6.

#### O. Bi-Cycle Mission Plan Guidelines

The Bi-Cycle Mission Plan extended from the end of the TV Mapping Cycle III (March 11, 1972) to the beginning of Sun occultation (April 2, 1972). For the first 15 days, to March 15, 1972, space-craft power usage tests were conducted to determine maneuver characteristics. No HGA maneuvers were performed during this period, but TV mapping was conducted on a noninterference basis. An 8-day window was then available to March 23, 1973, when HGA pointing maneuvers were allowed: TV mapping was conducted during this period. The remaining 10 days before April 2, were used only for SCT testing in preparation for the solar occultations.

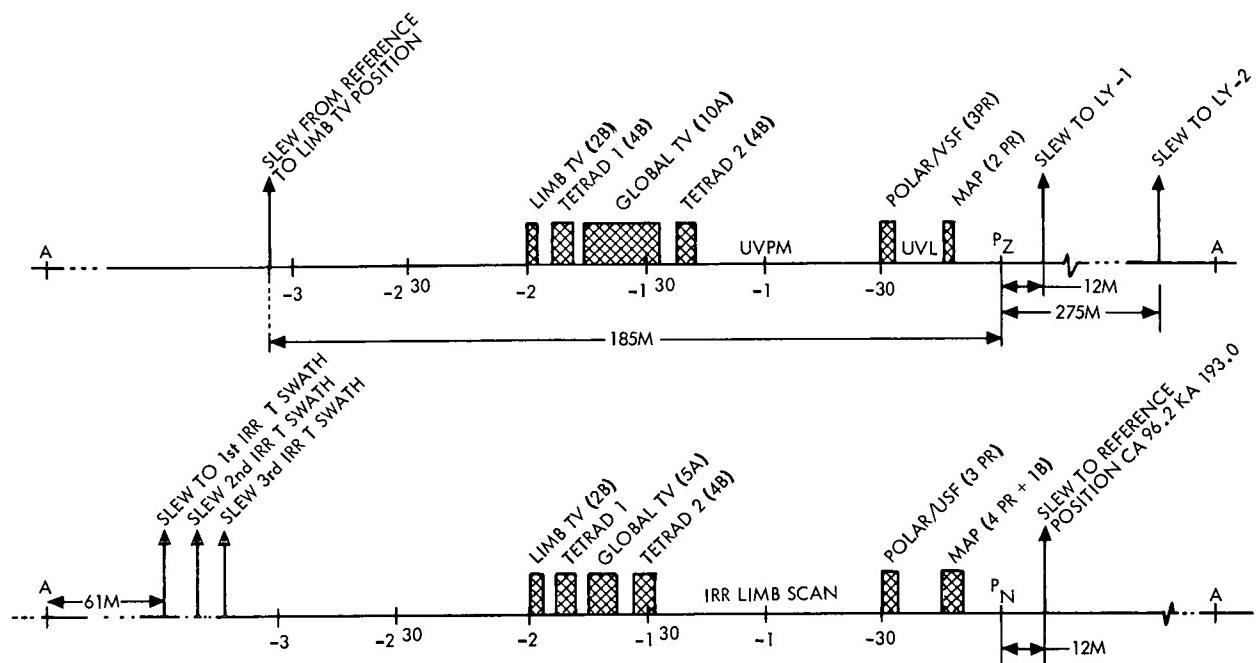


Fig. 1. Recon I mission profile

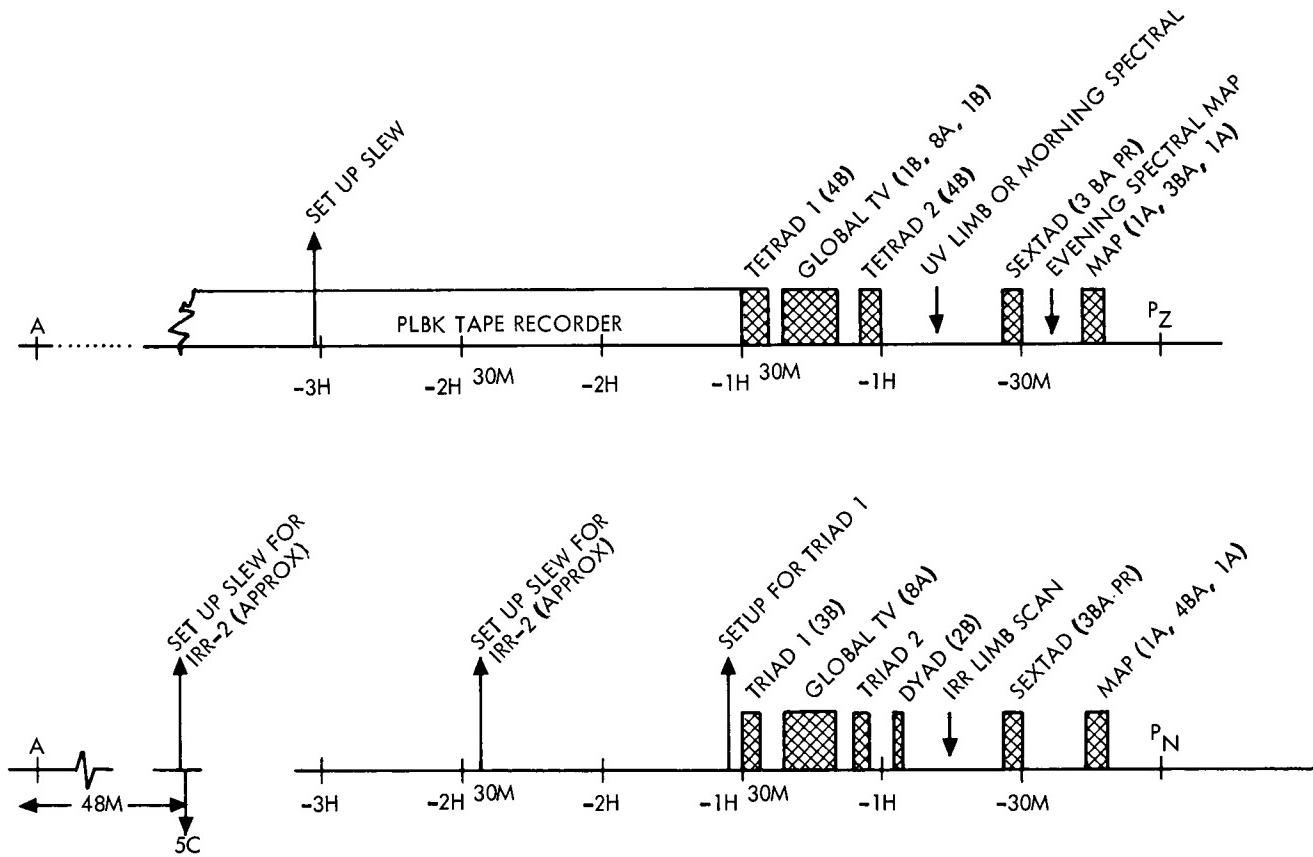
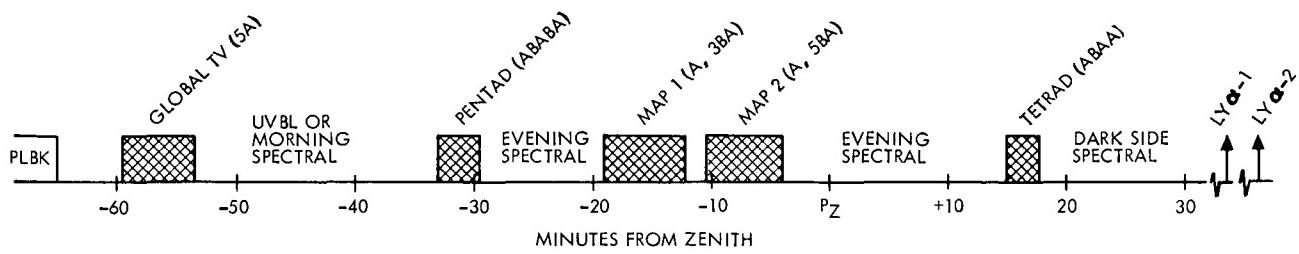


Fig. 2. Recon II mission profile

NORTHERN HEMISPHERE  
RECONNAISSANCE



NORTHERN HEMISPHERE  
RECONNAISSANCE

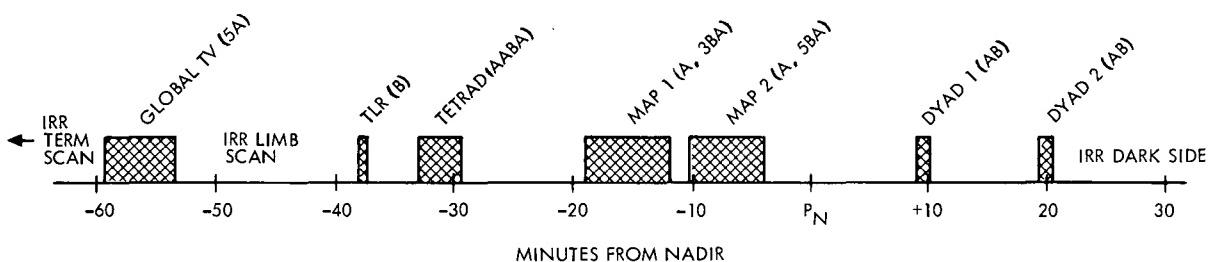
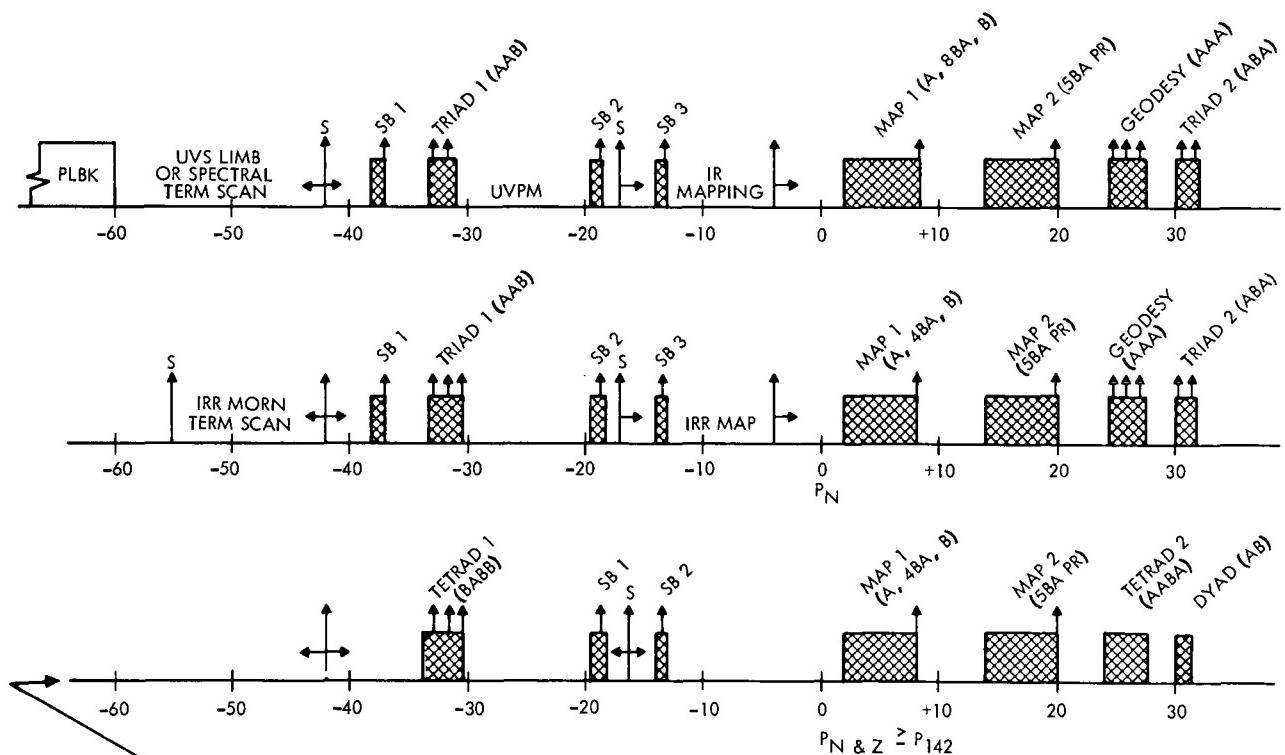


Fig. 3. Cycle I mission profile



BEGINNING ON REVOLUTION 142, OR LATER, BOTH REVOLUTIONS  
WILL EVOLVE TO THE PLAN DESCRIBED

Fig. 4. Cycle II mission profile

## PICTURES (PIXS)

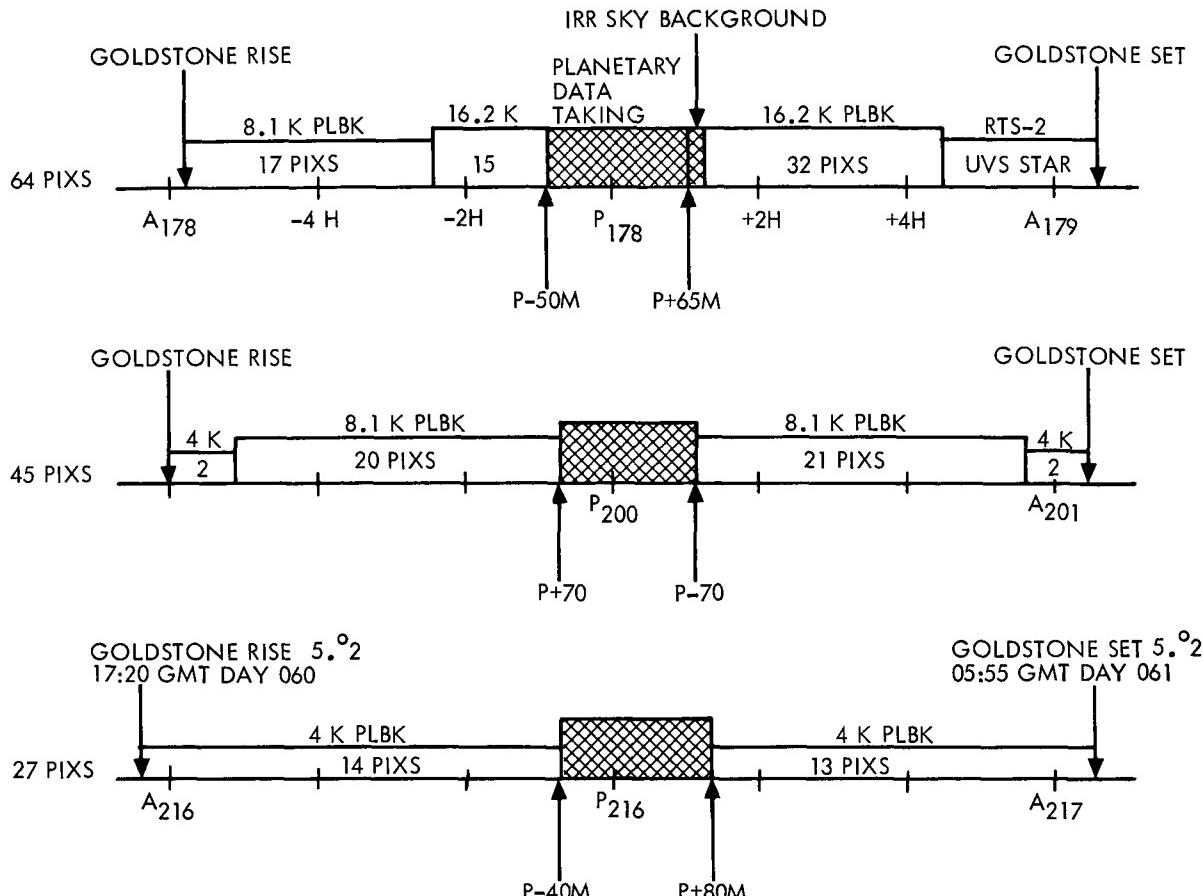
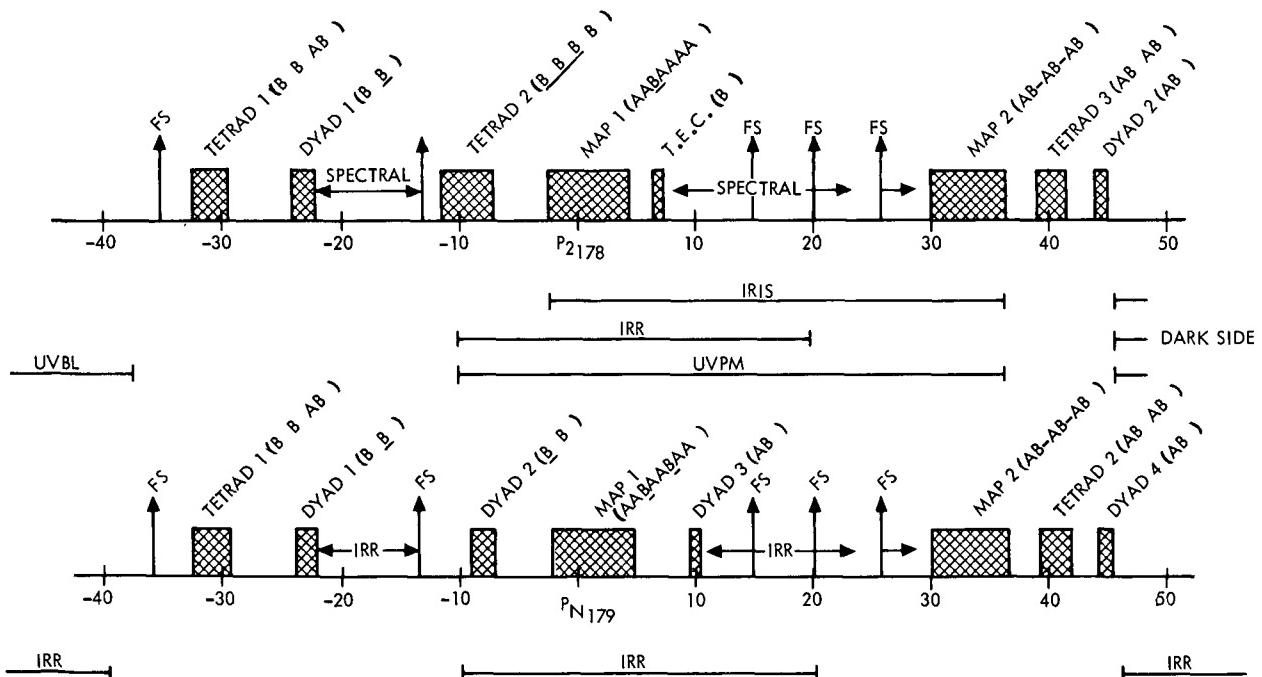


Fig. 5. Cycle III playback profile



**NOTE:**

THE UNDERLINED FRAMES WILL BE DELETED BEFORE THE END OF CYCLE III

Fig. 6. Cycle IIIa profile (beginning)

## II. TRACKING AND DATA SYSTEM PLAN AND CONFIGURATION

The Tracking and Data System plan and configuration remained the same as that presented in Volume II of the Tracking and Data System Support for the Mariner Mars 1971 Mission (Section III).

## III. TRACKING AND DATA SYSTEM FLIGHT SUPPORT

### A. General

Tracking and Data System flight support for Mariner 9 Spacecraft Orbital Operations extended from orbit insertion (November 14, 1971) through the end of the Bi-Cycle Mission Orbit Operations (April 1, 1972). (See Section I, Subsection G, for the Standard Mission Orbit Operations cycle plans, number of orbits, and respective dates.) The Reconnaissance, Mapping, and Bi-Cycle Plans were formulated and placed into operation on January 3, 1972 as a result of the severe dust storm on the surface of Mars, encountered at the time of orbit insertion.

Details of the TDS flight support were obtained from monthly DSN Operations Reports for MM'71. The mission-dependent DSN Operations Organization is described in Volume I. Functional flight support pass chronology data for the DSN are presented in Subsection B. DSN Telemetry, Tracking, and Command Systems analysis and performance evaluations are presented in Subsections C, D, and E.

All times and dates herein are expressed in Greenwich Mean Time (GMT or Z).

### B. Flight Support Pass Chronology

1. General. Tracking and Data System flight support included in this volume for Mariner 9 spacecraft orbital operations extended from the end of orbit insertion, 0101Z on November 14, 1971, day 318, through the end of the Bi-Cycle Mission Orbit Operations Plan, orbit 278, April 1, 1972, day 92. For a more complete description of the MM'71 Mission Plan, see Project Document PD 610-16, NP-71-4-22A.

2. Pass chronology data. A total of 139 passes (492 total tracks) were supported during the 4 months and 17 days of this period, during which 32,567 commands were transmitted to the spacecraft.

General performance of all DSN systems supporting the MM'71 Mission was excellent. DSN pass chronology activity is summarized in Table 1. Details of pass chronology are presented in the appendix. Only anomalies affecting the prime data source (the station whose telemetry HSD was being processed by the Central Processing System (CPS) or, if the CPS was not supporting, the station that was two-way during track overlaps) are given in the pass chronology on a pass-by-pass or track-by-track basis. Each anomaly is prefaced by a

facility or system identifier, such as DSS, GCF, or CPS. Anomalies are listed by item number and time of failure and are limited to items that significantly affected mission operations during scheduled DSN flight support (interruptions of real-time data flow or actual data loss to the Project for 5 min or longer).

Configuration deviations that restricted the Project from conducting normal or planned operations commensurate with scheduled DSN support were considered significant and will be found in the pass chronology. Comments listed under deviations or anomalies in the pass chronology were based on real-time observations and indications and did not necessarily reflect nonreal-time followup on items requiring further investigation.

All data outages were considered as real time and recoverable, and data outage times were considered the same as system or equipment down times, unless otherwise indicated.

### C. DSN Telemetry System Analysis and Performance

Residual data plots for November 1971, shown in Volume II of the TDS Support for the Mariner 1971 Mission, include the MOI for all stations. Residual data plots of SNR levels, uplink (UL) signal levels, and downlink (DL) signal levels for each station tracking Mariner 9 spacecraft during this reporting period are shown in Figs. 7 through 27. Values plotted were taken at meridian crossing for each pass. The set of plots represents those stations that have actively participated in tracking the Mariner 9 spacecraft during this reporting period. The number of days plotted varies from station to station as a function of individual station tracking schedule. A statistical analysis on absolute data values yielded results detailed in Table 2.

### D. DSN Tracking System Analysis and Performance

#### 1. Interface with experimenters

a. Data provided for celestial mechanics experiment. The Tracking System Analysis Group provided data for the celestial mechanics experiment (CME) in the form of a CME tape written in conjunction with the master data records (MDR).

b. Data provided for occultation experiment. The Tracking System Analysis Group.

provided the following data for the occultation experiment:

- (1) A copy of the engineering predicts covering each occultation and a copy of synlo predicts for each station with an open loop receiver.
- (2) Pseudoresiduals for each station participating in the occultation events.
- (3) A project tracking tape (PTT) for each occultation event. Data coverage for each tape was from 10 min prior to enter occultation to approximately 15 min after exit occultation. Tables 3 through 6 show the occultation view period for each station participating.
- (4) Each PTT provided was supplemented with a 1443 printout showing transmitter frequency, data editing, pass summary data, and the first and last physical data record on the tape.

Table 7 shows the tapes provided for the occultation experimenter and the recycle schedule used in providing the tapes.

2. Orbital trim maneuver doppler shift. The orbital trim maneuver necessary to put Mariner 9 into a 12-hr orbit was planned for a ground observed time of 02:43:44 GMT, November 16, 1971. The burn was programmed to last 6.25 sec and to result in a total doppler shift (one-way) of -117.65 Hz. The tracking data were processed by the pseudoresidual program in near real time, and the resulting doppler residuals were hand-plotted as seen in Fig. 28. The doppler residual as produced by the pseudoresidual program appeared to be within 1 Hz of the predicted value.

At the conclusion of the first set of occultations, it was decided to effect a second orbital trim maneuver to increase the period and the perapsis altitude. This maneuver was planned for a ground observed time of 21:58:52, December 30, 1972. The burn was programmed to last 17.2 sec and result in a total two-way doppler shift of -596 Hz.

Navigation provided the Tracking System Analysis Group with two probe ephemeris tapes (PETs), one tape without the burn trajectory, and one tape with the burn trajectory included. Predicts were generated using the no-burn probe ephemeris tape. Residuals were computed using the actual observed data minus the no-burn prediction data, thus illustrating the actual burn as it occurred. The doppler residuals as produced by the pseudoresidual program were -595 Hz, or within 1 Hz of the predicted value. Figure 29 shows the orbital trim maneuver burn as it appeared in the data. This display was made available on the predicts status display CCTV. It was another example of the inherent capability of the Tracking System Analysis Group to monitor and display spacecraft events as they appear in the data.

In summary, TDH data were basically good throughout this reporting period. Data losses were caused primarily by disk problems within the 360/75 computer system. The Tracking System Analysis Group was able to provide recovery of 98.5% of data losses by requesting retransmission

of data from the CP or DSS when necessary. With the exception of the disk problems, no major difficulties were experienced in performing DSN tracking analysis activities.

### 3. TDH data received and processed

a. TDH system. The tracking system gathered and recorded tracking data and transmitted it to the SFOF for use in support of the spacecraft navigation function. As these data were received in the SFOF, it was the responsibility of the Tracking System Analysis Group to validate, edit, store, and process these tracking data so that they may be passed on to the Navigation Group and other users of the DSN.

b. Prime DSS coverage. DSSs 12, 41, 62, and 14 remained the prime DSN stations for the Mariner mission during this reporting period. Due to 360/75 computer software problems, the radio metric data accountability was not 100% reliable for this reporting period.

c. TDH subsystem problem at DSS 12. On December 2, 1971 (day 336), starting at 01:10:00, the TDH subsystem began losing a digit in the day of year (DOY) field, and the problem was not corrected until 03:05:00. Because of this error in the data, it was impossible to process the data taken during this period in the 360/75.

d. Summary of tracking data. Radio metric data received and processed during this period were generally of good quality with very few outages. The basic tracking plan used during this reporting period was two-way doppler tracking with two-way transfers between the prime DSN stations. One-second sample rate requirements by the occultation experimenter account for the large amount of tracking data.

### 4. Predicts

a. Orbital predicts. Predicts were generated to meet occultation experiment requirements and to obtain good two-way spacecraft acquisition data. The track synthesizer frequency (TSF) and the two-way acquisition logic were determined in near real time by the Tracking System Analysis Group. The TSF and the sequence of events to obtain two-way acquisition were displayed on the predict status CCTV display. Figure 30 is an example of the predicts message displayed. This message contained the TSF to be used for both enter and exit occultation, the transmitter on time, transmitter on frequency, the tuning rate, and tuning span.

b. Significant predict analysis. On day 354 the Navigation Team provided data which indicated that the last occultation would occur on day 357 for the Goldstone Zenith Station. The Tracking System Analysis Group analyzed the data and concluded that one additional occultation had been overlooked by the Navigation Team. After consultation with the Navigation Team concerning this possibility, it was concluded that under the current double-precision trajectory configuration, it was possible to miss small occultations. A new double-precision trajectory run was executed with a smaller event search interval and the existence of one more occultation was proven. This is an example of the valuable technical interfaces that

existed between the various elements of the DSN and the Project.

c. Accuracy of predicts during orbital phase. During orbital phase, the uncertainties in the spacecraft trajectory are far greater than during the cruise phase. The resulting inaccuracies in predicts at times get large enough to be considered bothersome. A simple measure of the predicts error is the value of the doppler residual produced by the pseudoresidual program, since this is merely the raw doppler data minus the predicted doppler data. Two-way doppler residuals were recorded from pseudoresidual output at enter occultation minus 2 hr, the local maximum (peak) near periapsis, enter occultation, exit occultation, and exit occultation plus 2 hr and can be seen in Table 8. The horizontal lines indicate a new PET. As can be seen, the worst PET was the one in use from day 331 to 334, when the maximum doppler residual exceeded 400 Hz and the maximum error in predicted occultation time exceeded 20 sec.

d. Special predicts. Two sets of special predicts were generated for the second orbital trim maneuver: one set using a PET without the burn trajectory, and one set using a PET with the burn trajectory.

e. Summary of predicts. Predicts for this reporting period were very good. Adjustments and biases were made in real time to account for spacecraft events having an effect on frequencies used by the DSN. A total of 98 sets of predicts were generated. Sixty-seven sets were transmitted to the DSSs while the remaining sets were used for special events and for predicts studies.

5. Occultations. The DSN Tracking System Analysis Group provided two areas of support to the occultation experiment: predicts for the open- and closed-loop receiver, and gathering of the closed-loop data in a form usable by the experimenter.

The closed-loop predicts are the standard tracking predicts with track synthesizer frequencies manually set to optimize acquisition at exit occultation, and to restrict tuning to handovers and exit occultation to minimize data loss. The open-loop predicts are special predicts called synlo.

The tracking data processing provided by the Tracking System Analysis Group consisted of processing one-second TDH data encompassing occultation, using the DSN tracking software subsystem in the 360/75. The processing is no different than that which is provided for the Navigation Team, the final output being a project tracking tape (PTT), except for problems peculiar to handling one-second sample rate TDH. Special procedures which enable the tracking software subsystem to successfully process two streams of one-second TDH at TTY rate (one point per 6 sec) had to be developed in near real time.

The occultation experimenter was unable to process PTTs for the first week of orbital operations because of problems with the occultation software. This resulted in a backlog of over 14 PTTs (two a day, one for Goldstone and one for nadir occultations). This would have been of no consequence except that there were problems with eight of the initial tapes which went undiscovered

until after the tracking data had been cleared off the real-time disk. The problems were of a nature that did not affect navigation but only the one-way exit occultation data. The late discovery of the bad tapes meant that the Tracking System Analysis Group had to find time to take the tracking software subsystem offline to recreate the unusable tapes, a process that required one hour per tape. These recreated occultation PTTs were successfully provided.

An additional data type was planned for the occultation in the form of 10 per second DTS data provided by DSS 14. Unfortunately, the SFOF portion of the system was not operational. The data were, however, recorded on-site, and a plan was formulated to process these data in December using an offline 360/75.

The occultation record as of November 30, 1971 was:

Number of occultations:	34
Number of successful entries:	34
Number of successful exits:	34
Rapid two-way reacquisition at exit:	29

In each instance of a single station missing entry or exit open-loop data (two DSS 41 entries, one DSS 62 exit), a second station did take good data. The two DSS 41 entries missed on open loop were caused by an error in synlo predicts, and the exit open loop missed at DSS 62 resulted from the station misinterpreting the synlo predict output.

There were five cases where the first attempt at two-way acquisition at exit occultation was unsuccessful. The first case was caused by DSS 62 being off point. The remaining four cases were a combination of frequency errors and a space-craft receiver anomaly. The reacquisition at exit depended upon dropping the spacecraft at its rest position at enter occultation and reacquiring at exit by tuning about this rest frequency. The problem was that after about  $2\frac{1}{2}$  days in orbit the spacecraft receiver's rest position shifted by 96 Hz at VCO level for no known reason. Once this anomalous shift was detected and its symptoms understood, tuning procedures were modified accordingly and all subsequent acquisitions at exit were successful.

6. Tracking system data analysis. The Tracking System Analysis Group operated a real-time DSN 360/75 pseudoresidual program that monitored tracking prediction quality as well as tracking data quality. To monitor significant events, hand plots were prepared and displayed on the predict status CCTV.

Pseudoresiduals were computed for each station pass and displayed on CCTV and on teletype at the end of each pass. The average value of the residuals for each pass was computed and plotted. Figures 31 through 48 illustrate the average two-way doppler residual and doppler noise per pass for each of the prime stations. Average residual plots over each station were computed from day 318, pass 168 (OI) through day 092, pass 307, April 1, 1972.

#### E. DSN Command System Analysis and Performance

1. Command activity. Command activity in support of the orbit of Mariner 9 was significantly

increased during this report period. Occasionally, delays were caused by erroneous data displays or loss of data.

In summary, the Command System performed extremely well since the update of the TCP software, which led to a great increase in operational confidence. To date, a cumulative total of 37,232 commands has been transmitted to the spacecraft. Table 9 shows the total number of commands transmitted by each DSS as of March 31, 1972. A four-month summary of command activity is shown in Table 10. The command activity summary for November 1971 is given in Volume II of the TDS Support for the MM'71 Mission.

2. System performance. The DSN Command System performed well with only three aborts during December 1971. Of these, two were caused by equipment failure and one by a procedural error. During January 1972, no aborts occurred; during February, five occurred; and none occurred in March.

Other problems were experienced which caused delays in the use of the Command System by the Project. These problems had no significant effect on the mission, but did cause periodic delays. Causes of these problems were:

- (1) 360/75 outages.
- (2) TCP I/O buffer failures.
- (3) SFOF data set failures.
- (4) HSDL outages.
- (5) TCP software anomalies.
- (6) Procedural errors.
- (7) Equipment failures.

3. System upgrade. On January 17, 1972, the 360/75 orbit support software, Model 5, was upgraded for flight support. However, it was removed from flight support after problems were noted in the Command System. The software was revised from version 24.0 to version 27.2 and again placed on flight support on January 30, 1972. However, two problems remained to be fixed:

- (1) Display of confirmation messages on DTV or TTY delayed during certain 360/75 high activity periods.
- (2) Project and NAT Command intermittently locked out of CPS during the editing process of the tracking disk file.

These two problems were corrected as soon as the required changes were approved by the Configuration Control Board and incorporated into the 360/75.

Model 5 of the 360/75 orbit support software was then revised from version 27.2 to version 27.4, and the problems were resolved.

4. Command MDR. Relatively few problems were encountered in the generation of Command MDRs after the introduction of the Model 5 software version 27.4 into the 360/75. The recovery of the command data lost before Model 5 upgrade was accomplished by having DSSs 12, 41, and 62 replay the required original data records (ODRs) during February and March 1972. Command data recovered consisted of:

- (1) 12 passes from DSS 12.
- (2) 13 passes from DSS 41.
- (3) 9 passes from DSS 62.
- (4) 2 passes from DSS 14.

The Command MDR file for Mariner 9 was then complete and up to date.

Table 1. DSN flight support/orbital operations: Mariner 9 pass chronology from orbit insertion (Nov. 14, 1971) through bi-cycle plan operations (Apr. 1, 1972)

Month	Period Days - Passes	DSS	Coverage (tracks)	Ranging		S/C cmds xmtd	Remarks
				$\mu$	$\tau$		
Nov 1971	14 Nov 1971 to 1 Dec 1971 Pass 168 to Pass 185, or <u>17 Passes</u> Days 318-335	12 14 41 42 51 62	14 14 14 3 2 12	9	-	583 23 542 - - 1,596	Negative displacement of SNR residuals at DSS 41 and 51, plus gradual negative divergence of the residuals at all stations, noted. Tracking predicts generally good. Special predicts support for orbital operations. MDR records on tapes generated with each SDR disc selection. Command System performance excellent.
	Nov 1971 Total		59	9		2,744	
Dec 1971	1 Dec 1971 to 1 Jan 1972 Pass 185 to Pass 216, or <u>31 Passes</u> Days 335-001	12 14 41 42 51 62	28 29 29 3 4 27	22 1 1		577 17 425 - - 6,827	Mostly occultation phase orbital predicts; 25 sets total, including 2 sets for Trim 2 maneuver, all very good. Some minor 360/75 software problems, slightly reducing the quality of the tracking data. 13 MDRs generated with each SDR deletion. Command System performance good; only 3 aborts.
	Dec 1971 Total		120	23	1	7,846	
Jan 1972	1 Jan 1972 to 1 Feb 1972 Pass 216 to Pass 247, or <u>31 Passes</u> Days 001-031	12 14 41 42 51 62	32 31 25 4 5 31	8 7		679 27 395 43 - 5,929	Telemetry System performance excellent; few outages. Radio metric data received and processed generally of good quality. Command System available 97 percent of time; no aborts. On 17 Jan 1972, 360/75 software Mod 5 upgraded for flight support; placed in service 30 Jan 1972 after resolving problems with Command System.
	Jan 1972 Total		128	15		7,073	
Feb 1972	1 Feb 1972 to 1 Mar 1972 Pass 247 to Pass 276, or <u>29 Passes</u> Days 031-060	12 14 41 42 51 62	29 29 26 4 1 29		11	343 30 267 15 - 7,485	Seven Master Data Records (MDR) tapes and their backups were generated with each SDR deletion. Continued high command activity. Telemetry, Tracking, and Command System performance excellent.
	Jan 1972 Total		118	11		8,140	
Mar 1972	1 Mar 1972 to 1 Apr 1972 Pass 276 to Pass 307, or <u>31 Passes</u> Days 060-091 Overall Total 14 Nov 1972 to 1 Apr 1972	12 14 41 42 51 62	1 27 12 1 0 26		11	22 691 227 1 0 5,823	Command System performance very good, even with minor problems. MDR tapes and their backups were generated with each SDR deletion. Basic tracking plan two-way doppler tracking with two-way transfers between the prime DSN stations.
			67	11		6,764	
			492	69	1	32,567	

Table 2. DSN telemetry systems analysis from orbit insertion (Nov. 14, 1971) to end of primary mission (Apr. 1, 1972)

Period	No. Readings	% Within 1.0 Db of Prediction	% Within 0.3 Db of Prediction	Arithmetic Mean, Db	Variance, Db	Standard Deviation, Db	Eng Sci	Most Often Observed Value, Db	Parameter
14 Nov 1971 to 1 Dec 1971, or Day 318 through Day 334	104	80.77	34.62	0.5519	0.2002	0.4474	Both	0.1 to 0.2	SNR
17 Days, total	106	81.13	26.42	0.5264	0.1536	0.3919	Both	0.4 to 0.5	Downlink Signal Level
	76	93.42	96.05	0.3671	0.1273	0.3568	-	0.1 to 0.2	Uplink Signal Level
1 Dec 1971 to 1 Jan 1972, or Day 335 through Day 365	86	90.70	34.88	0.4442	0.1008	0.3176	Eng	0.2 to 0.3	SNR
31 Days, total	85	85.53	36.47	0.4941	0.1608	0.4010	Sci	0.2 to 0.3	SNR
	112	83.04	26.79	0.5562	0.1355	0.3680	Both	0.9 to 1.0	Downlink Signal Level
	88	89.77	35.23	0.4420	0.1234	0.3513	-	0.3 to 0.4	Uplink Signal Level
1 Jan 1972 to 1 Feb 1972, or Day 001 through Day 031	87	95	40	0.1	0.3	0.5	Eng	0.3 to 0.4	SNR
31 Days, total	87	85	25	0.2	0.4	0.8	Sci	0.4 to 0.5	SNR
	87	85	23	0.3	0.5	0.9	Both	0.5 to 0.6	Downlink Signal Level
	88	98	49	0.1	0.3	0.6	-	0.2 to 0.3	Uplink Signal Level
1 Feb 1972 to 1 Mar 1972, or Day 032 through Day 060	84	88	44	0.2	0.3	0.7	Eng	0.2 to 0.3	SNR
29 Days, total	84	90	24	0.3	0.5	0.8	Sci	0.9 to 1.0	SNR
	113	65	17	0.4	0.8	1.1	Both	> 1.0	Downlink Signal Level
	84	99	51	0.1	0.2	0.4	-	0.1 to 0.3	Uplink Signal Level
1 Mar 1972 to 1 Apr 1972, or Day 061 through Day 091	67	69	24	0.3	0.6	1.1	Eng	0.2 to 0.3	SNR
31 Days, total	46	72	28	0.2	0.7	1.0	Sci	0.1-0.2 0.8-0.9	SNR
	67	54	10	0.5	0.9	1.3	Both	> 1.0	Downlink Signal Level
	41	90	29	0.2	0.5	0.6	-	0.6 to 0.7	Uplink Signal Level

Table 3. DSS 12 occultation view period

Day	Pass	Enter occultation	Exit occultation
318	169	0202:05.20	0238:13.84
319	170	0310:02.30	0345:58.80
320	171	0307:57.40	0343:47.60
321	172	0305:35.80	0341:21.80
322	173	0302:52.00	0338:30.50
323	174	0259:41.35	0335:14.57
324	175	0256:05.67	0331:32.60
325	176	0254:10.05	0327:27.55
326	177	0247:56.30	0323:04.44
327	178	0243:31.95	0318:30.32
328	179	0239:07.10	0313:51.30
329	180	0234:45.20	0309:17.40
330	181	0230:35.34	0304:53.70
331	182	0226:45.70	0300:52.40
332	183	0223:19.10	0257:06.00
333	184	0220:17.90	0253:45.60
334	185	0217:42.30	0250:51.30

Table 4. DSS 14 occultation view period

Day	Pass	Enter occultation	Exit occultation
318	169	0202:05.20	0238:13.84
319	170	0310:02.00	0345:58.22
320	171	0307:56.51	0343:50.83
321	172	0305:34.15	0341:20.50
322	173	0302:50.67	0338:30.50
323	174	0259:41.30	0335:14.50
324	175	0256:05.30	0331:32.50
325	176	0252:09.80	0327:28.85
326	177	0247:56.00	0323:04.00
327	178	0243:31.45	0318:29.05
328	179	0239:05.58	0313:51.03
329	180	0234:44.28	0309:16.25
330	181	0230:35.34	0304:53.45
331	182	0226:45.33	0300:48.70
332	183	0223:19.03	0257:05.32
333	184	0220:17.59	0253:46.90
334	185	0217:42.18	0250:52.55

Table 5. DSS 41 occultation view period

Day	Pass	Enter occultation	Exit occultation
318	168	1327:57.20	1404:04.70
319	169	1436:03.95	1512:08.40
320	170	1509:00.30	1544:54.30
321	171	1506:47.25	1542:37.60
322	172	1504:18.25	1539:57.70
323	173	1501:21.75	1536:54.75
324	174	1458:00.07	1533:26.00
325	175	1454:13.60	1529:33.90
326	176	1450:07.85	1525:17.95
327	177	1445:46.98	1520:55.45
328	178	1441:12.60	1516:11.35
329	179	1436:55.49	1511:40.55
330	180	1432:38.70	1507:07.50
331	181	1428:38.60	1502:50.30
332	182	1424:58.60	1458:55.10
333	183	1421:43.70	1455:22.35
334	184	1418:56.20	1452:16.20

Table 6. DSS 62 occultation view period

Day	Pass	Enter occultation	Exit occultation
319	170	1436:07.80	1512:08.40
320	171	1509:02.70	1544:54.10
321	172	1506:47.90	1542:35.40
322	173	1504:18.80	1539:57.90
323	174	1501:22.35	1536:54.20
324	175	1458:00.23	1533:24.62
325	176	1454:13.13	1529:31.05
326	177	1450:07.45	1525:16.82
327	178	1445:46.60	1520:47.43
328	179	1441:20.15	1516:10.87
329	180	1436:55.13	1511:33.66
330	181	1432:38.24	1507:04.25
331	182	1428:38.30	1502:49.36
332	183	1424:58.26	1458:54.15
333	184	1421:43.48	1455:22.35
334	185	1418:56.00	1452:15.20

Table 7. Project tracking tapes for occultation experiments

Day	Zenith Tape No.	Nadir Tape No.	Backup Tape No.
Mondays	6471	6481	6491
Tuesdays	6472	6482	6492
Wednesdays	6473	6483	6493
Thursdays	6474	6484	6494
Fridays	6475	6485	6495
Saturdays	6476	6486	6496
Sundays	6477	6487	6497

Table 8. Predicts accuracy

Day	Occ	Enter -2 hr	Peak	Enter	Exit	Exit +2 hr
2-Way Doppler Residuals (Hz)						
319	G	+13	+31	-61	-28	-10
	N	+49	+112	-230	-62	-11
320	G	N/A	N/A	N/A	+11	+0
	N	-9	-26	+56	+18	+0
321	G	-13	-37	+78	+62	+0
	N	-19	-56	+116	N/A	+1
322	G	-25	-73	+147	+24	+2
	N	-33	-93	+194	+64	+2
323	G	+2	+6	-10	-3	+1
	N	+3	+10	-11	-5	+0
324	G	+0	+3	-1	+0	+1
	N	-2	+9	-1	-1	+1
325	G	+1	+8	-9	-3	+1
	N	+5	+9	-4	-4	-1
326	G	+3	+13	-11	-5	-1
	N	+4	+20	-11	-3	+0
327	G	+8	+27	-44	-16	-0
	N	+10	+32	-51	-18	-0
328	G	+11	-39	-71	-23	-1
	N	+8	-27	-44	-14	-1
329	G	+11	+34	-51	-20	-1
	N	+16	+50	-83	-28	-2
330	G	+19	+60	-93	-35	-2
	N	+26	-77	-138	-48	-3
331	G	+18	+53	-92	-23	-2
	N	+25	-78	-128	-45	-3
332	G	+32	+100	-169	-94	-3
	N	+39	+126	-211	-73	-5
333	G	+50	+157	-262	-94	N/A
	N	+59	+185	-319	-99	-7
334	G	+72	+222	-370	-133	-8
	N	N/A	N/A	-420	-145	-3
335	G	+5	+12	-19	-10	-2
	N	+8	+23	-40	-18	-2
336	G	+13	+37	-64	-25	-3
	N	+18	+54	-93	-31	-4
337	G	+24	+71	-122	-49	-5
	N	+30	+90	-156	-62	-6
338	G	+46	+109	-186	-56	-7
	N	N/A	N/A	N/A	-1	-1
339	G	+3	+5	-7	-4	-1
	N	+5	+12	-20	-9	-2
340	G	+9	+24	-49	-17	-3
	N	+14	+37	-64	-25	-3
341	G	+20	+58	-94	-37	-4
	N	+25	+79	-129	-50	-5
342	G	+32	+100	-161	-62	-5
	N	+1	+3	-5	-2	-1
G = Goldstone occultation.						
N = Nadir occultation.						
Horizontal lines indicate a new PET.						

Table 9. Cumulative command activity to date

Activity	DSS					
	12	14	41	42	51	62
Commands	3,303	818	3,359	65	109	29,578
Percent down*	3.93	3.9	3.2	2.36	3.60	4.0

\*Includes 360/75 and HSDL outages.

Table 10. Four-month summary of command activity

Activity	DSS						Total
	12	14	41	42	51	62	
December							
Commands	577	17	425	0	0	6827	7846
Aborts	3	0	0	0	0	0	3
Percent Down*	4.48	0	5.17	0	0	3.02	-
January							
Commands	679	27	395	43	0	5929	7073
Aborts	0	0	0	0	0	0	0
Percent Down*	2.33	0	4.25	0	0	2.84	-
February							
Commands	343	30	267	15	0	7485	8140
Aborts	0	0	3	0	0	2	5
Percent Down*	5.86	3.58	4.28	Nil	0	3.6	-
March							
Commands	22	691	227	1	0	5823	6763
Aborts	0	0	0	0	0	0	0
Percent Down*	Nil	3.1	2.65	Nil	0	2.12	-

\*Includes 360/75 and HSDL outages

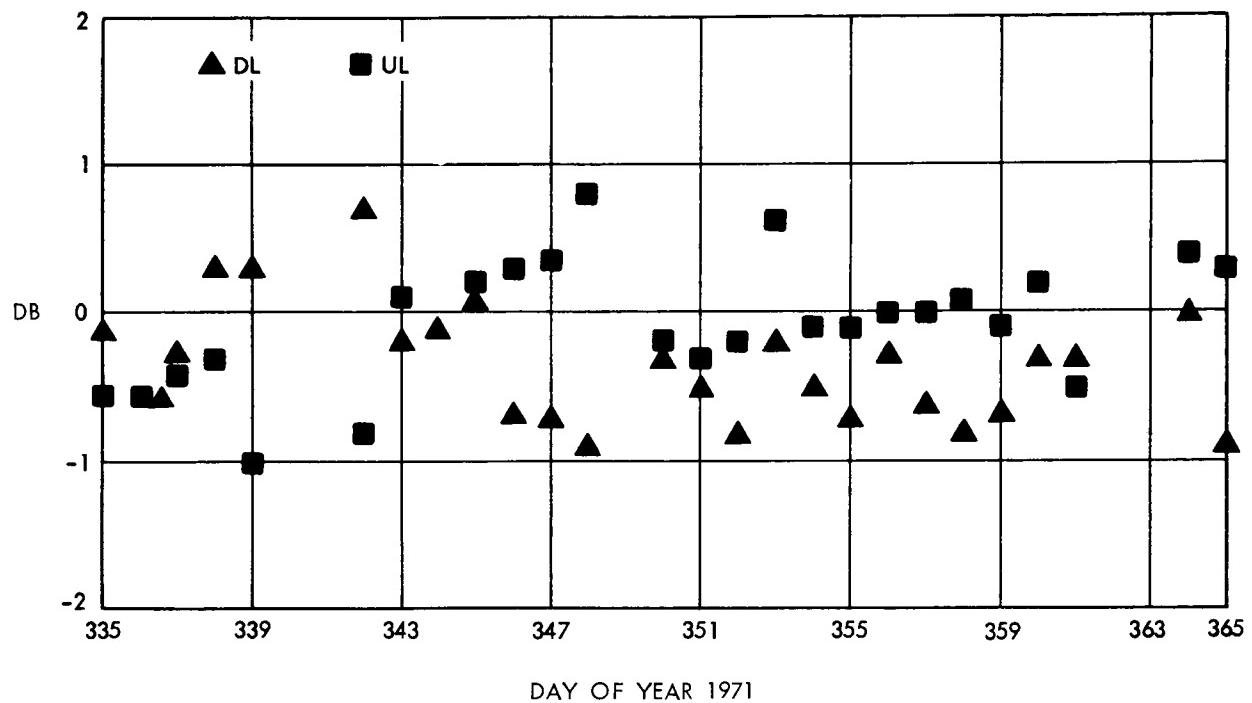


Fig. 7. Residual data plot for DSS 12, December 1971

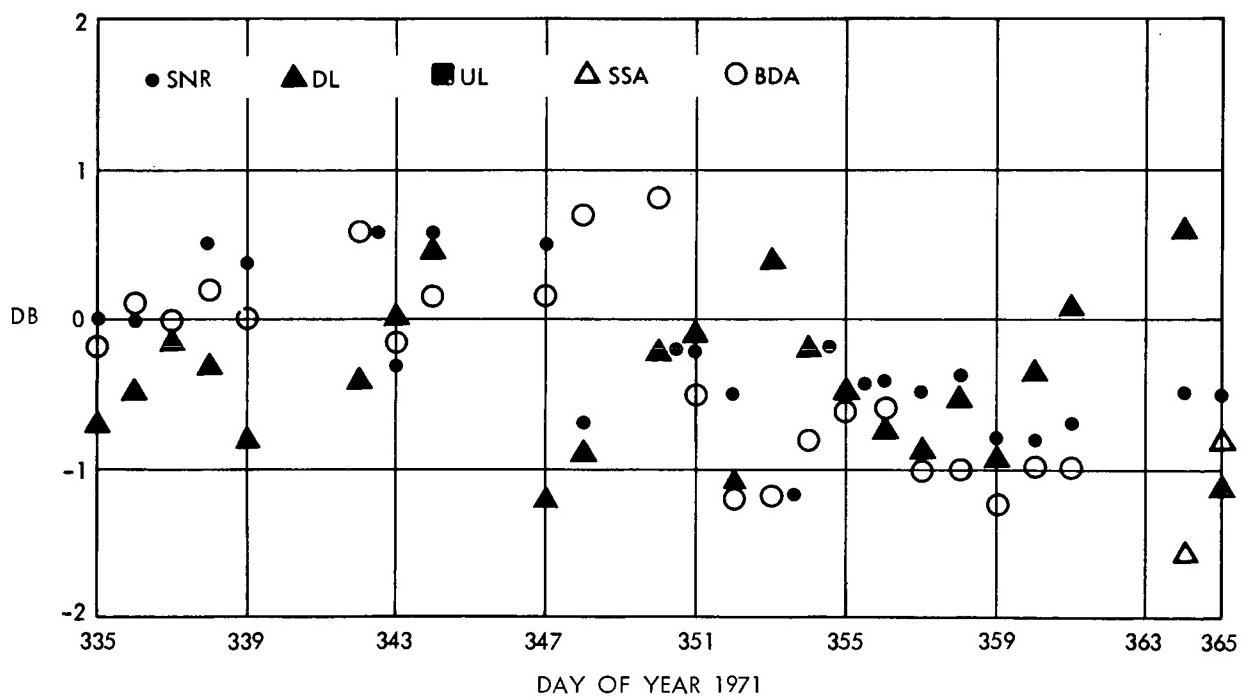


Fig. 8. Residual data plot for DSS 14, December 1971

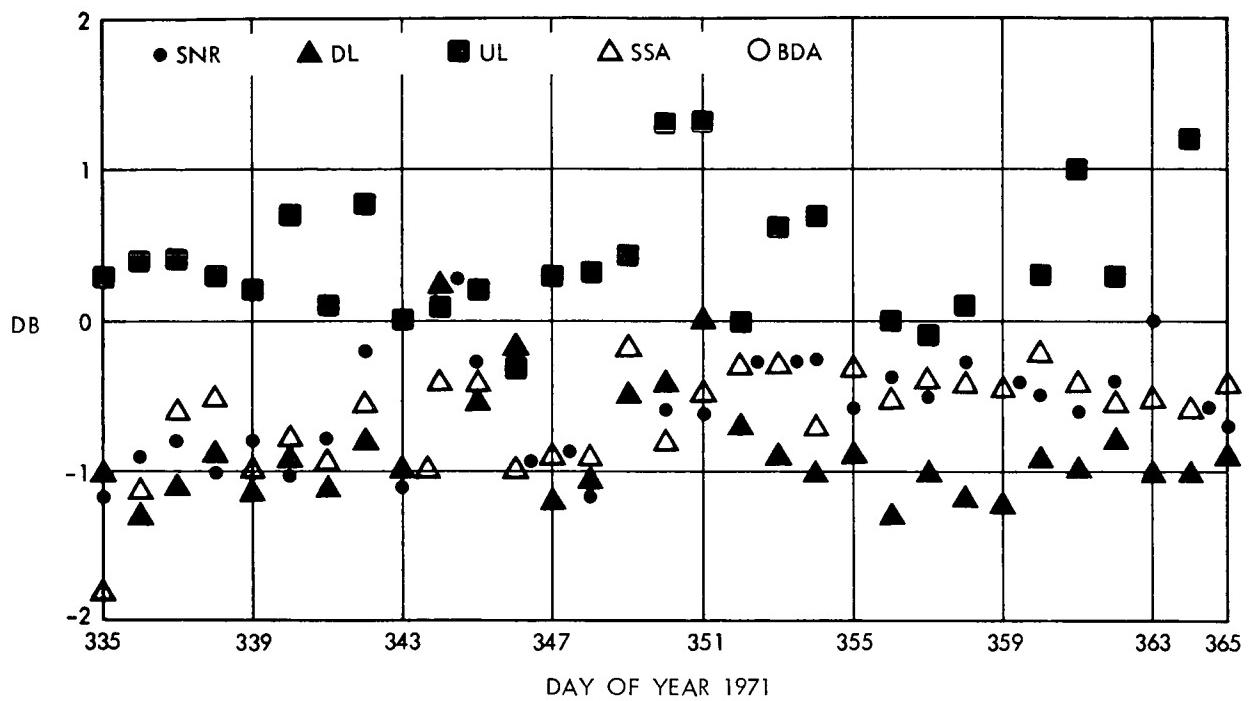


Fig. 9. Residual data plot for DSS 41, December 1971

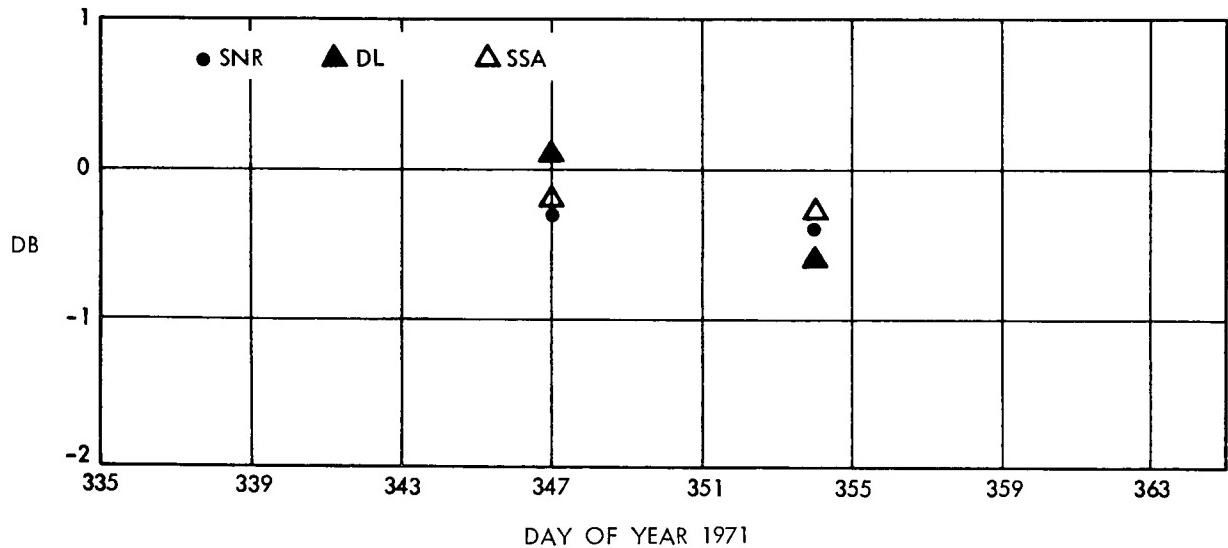


Fig. 10. Residual data plot for DSS 42, December 1971

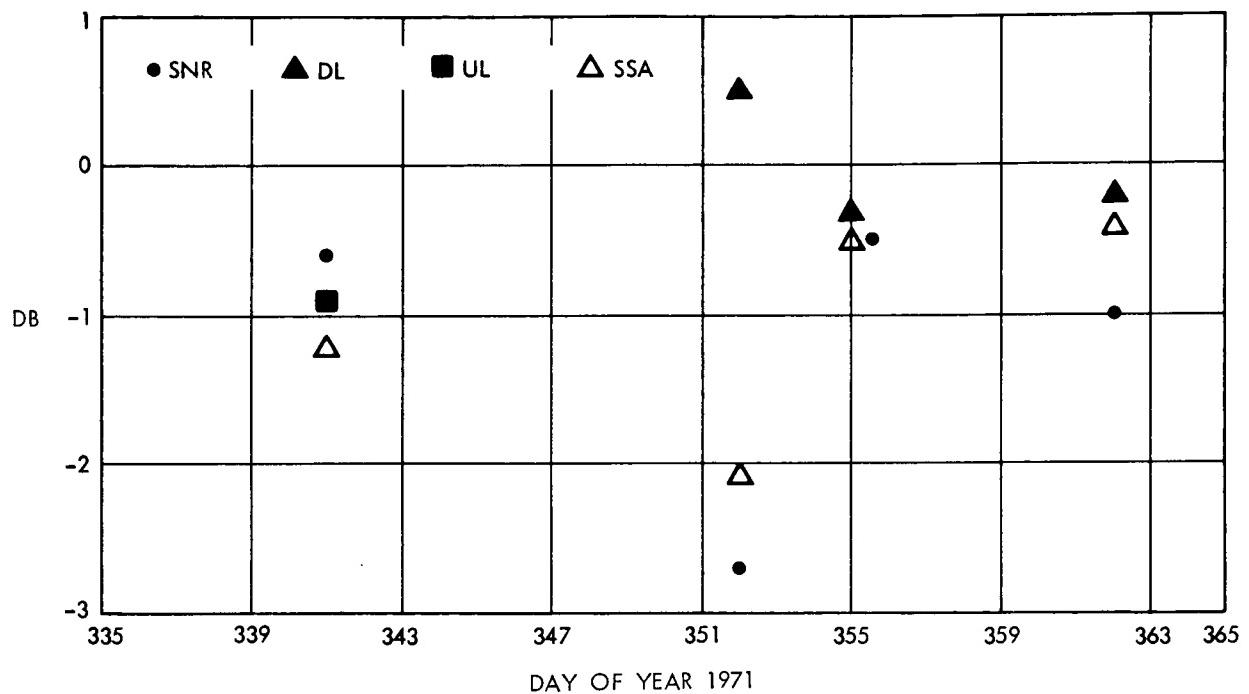


Fig. 11. Residual data plot for DSS 51, December 1971

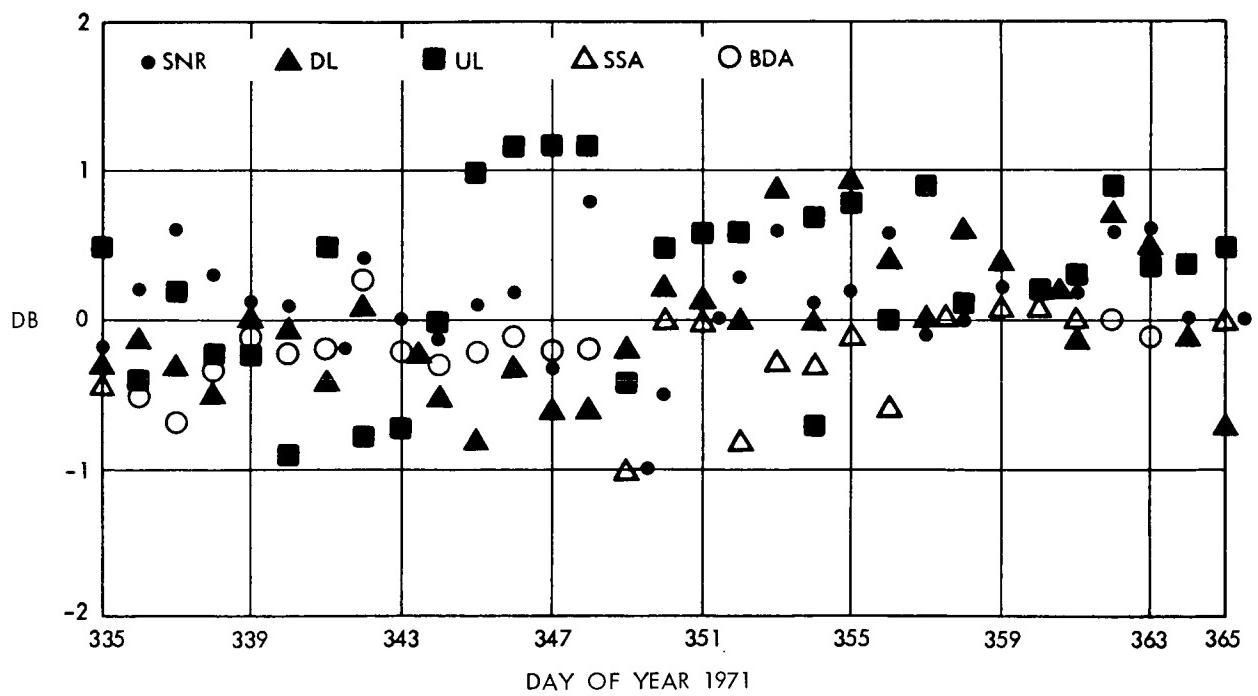


Fig. 12. Residual data plot for DSS 62, December 1971

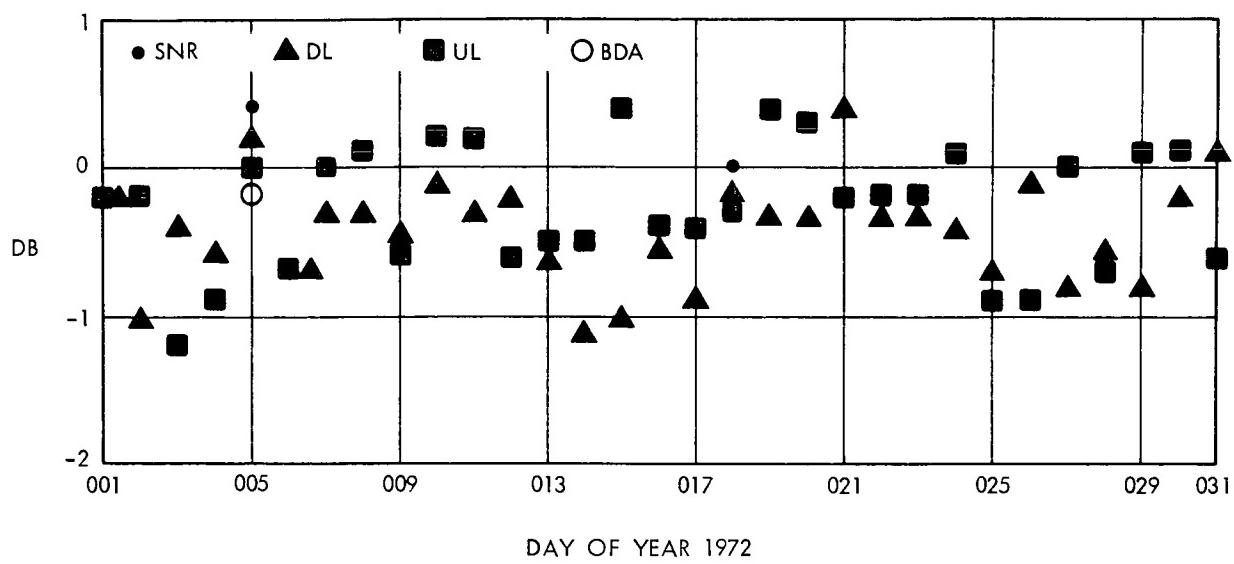


Fig. 13. Residual data plot for DSS 12, January 1972

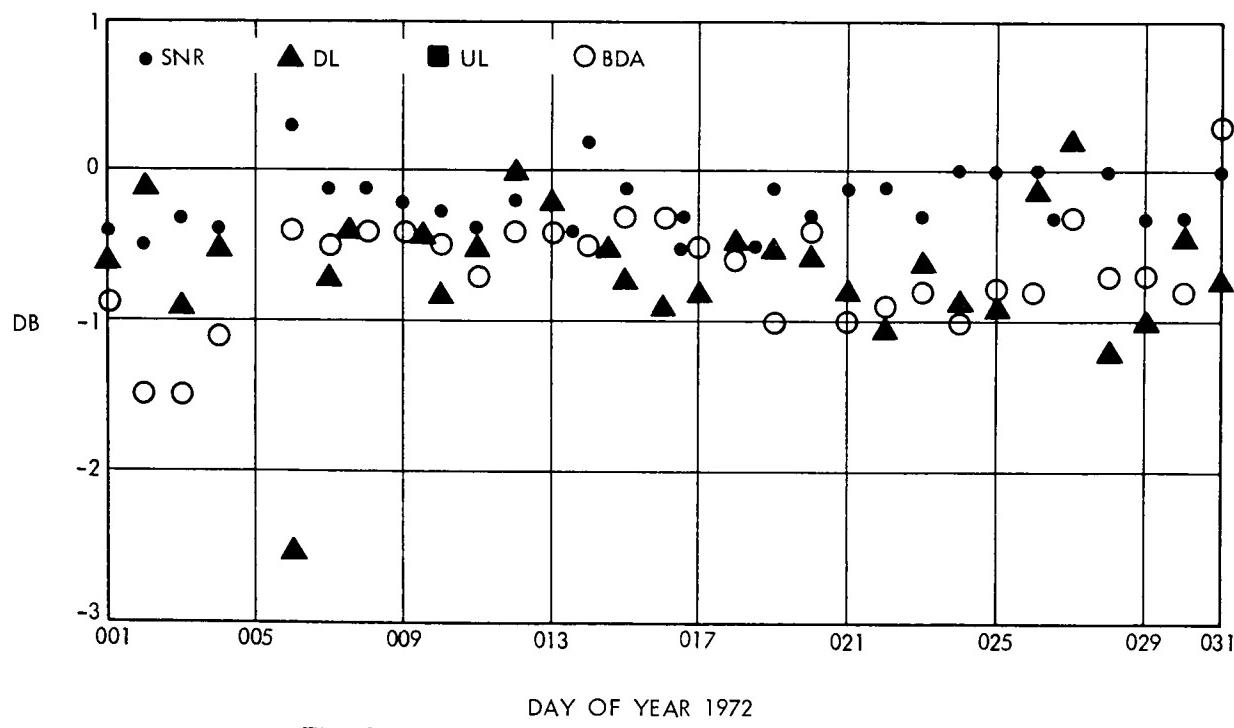


Fig. 14. Residual data plot for DSS 14, January 1972

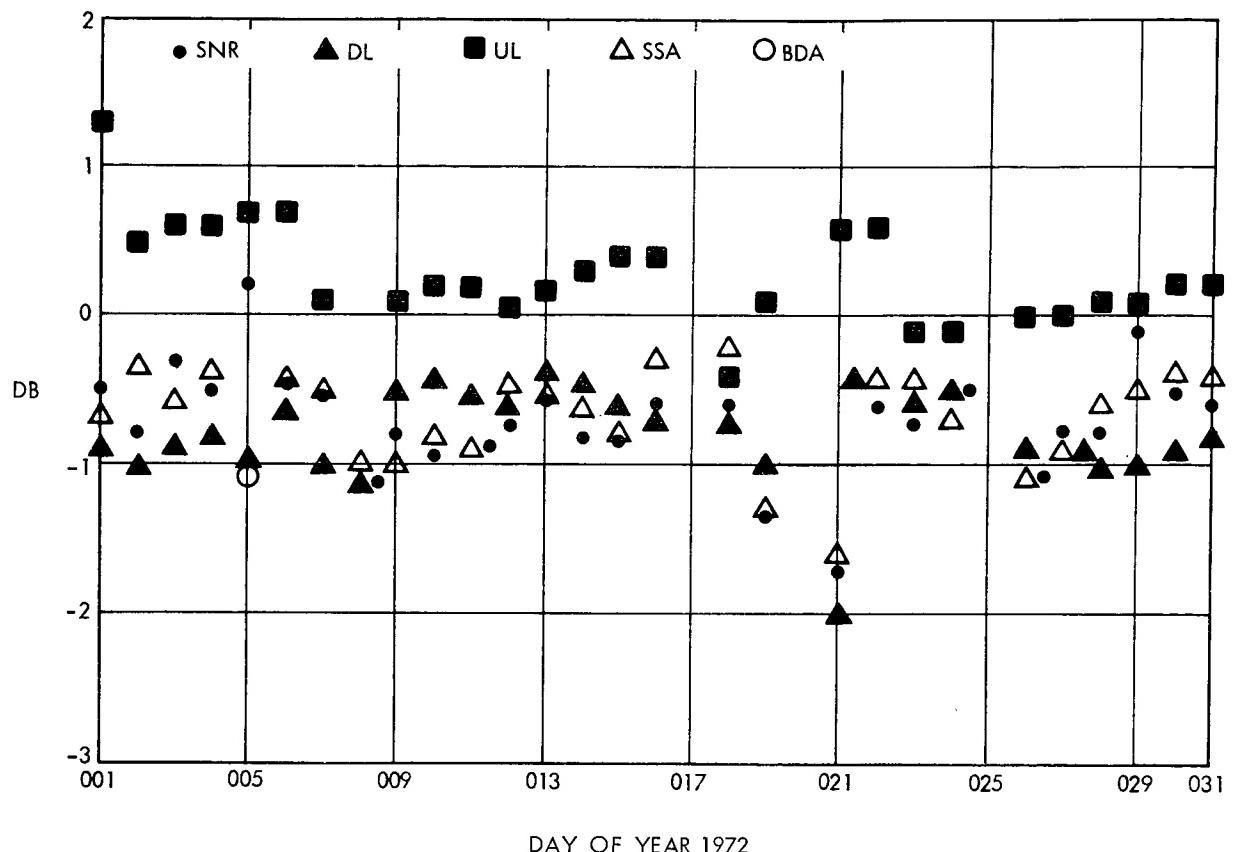


Fig. 15. Residual data plot for DSS 41, January 1972

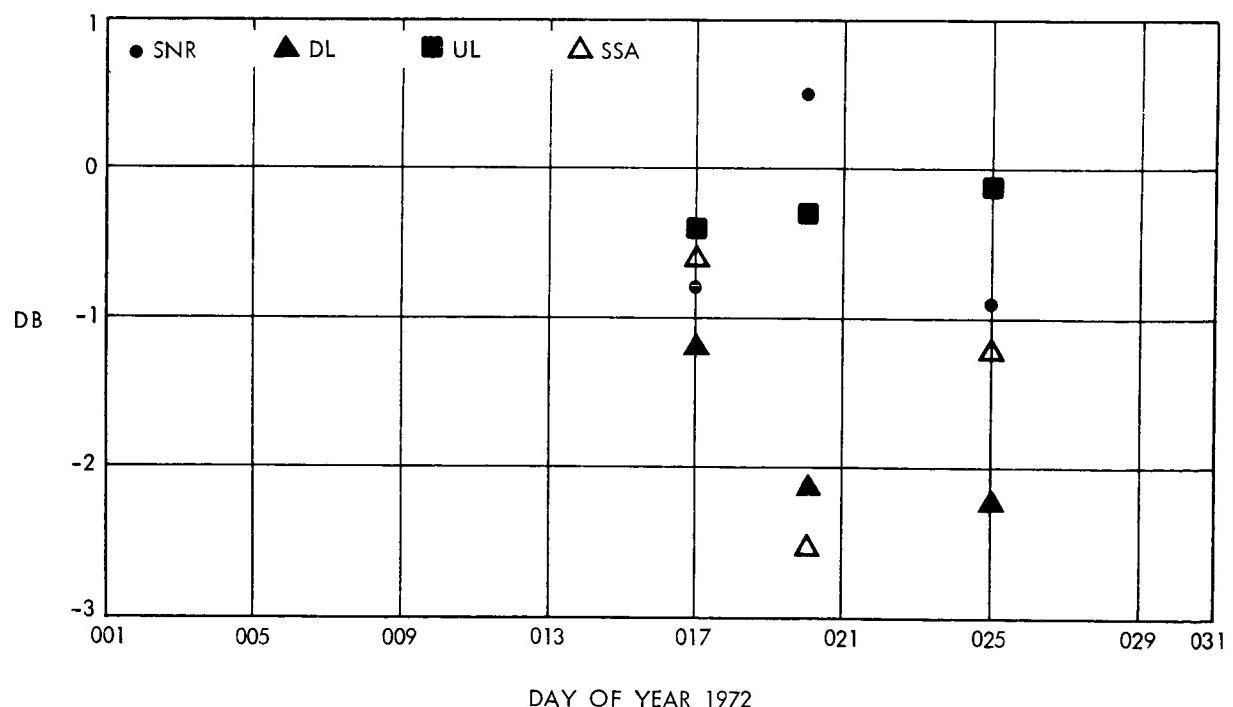


Fig. 16. Residual data plot for DSS 42, January 1972

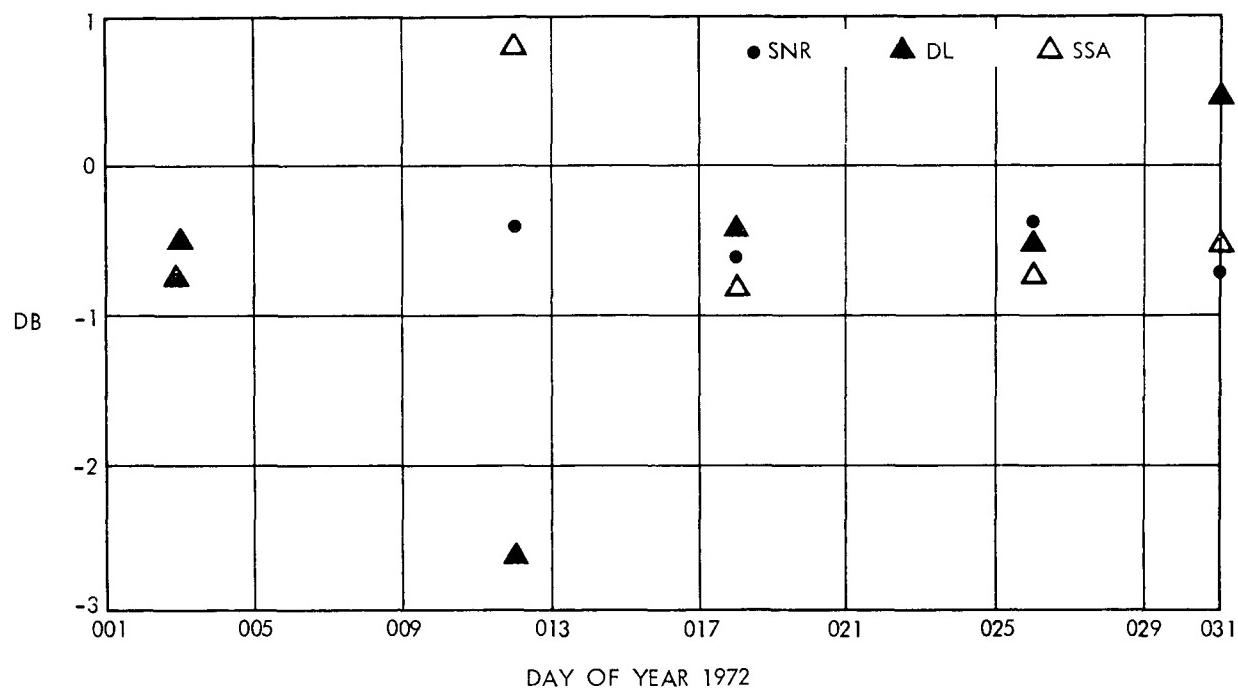


Fig. 17. Residual data plot for DSS 51, January 1972

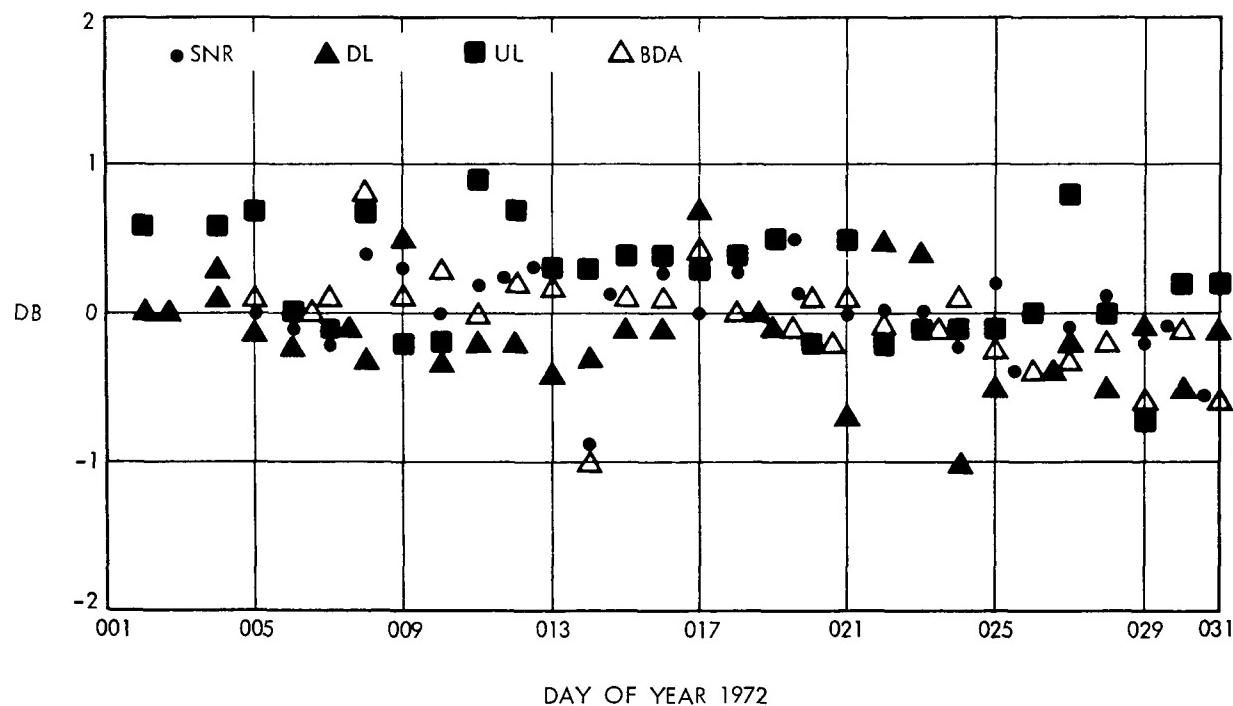


Fig. 18. Residual data plot for DSS 62, January 1972

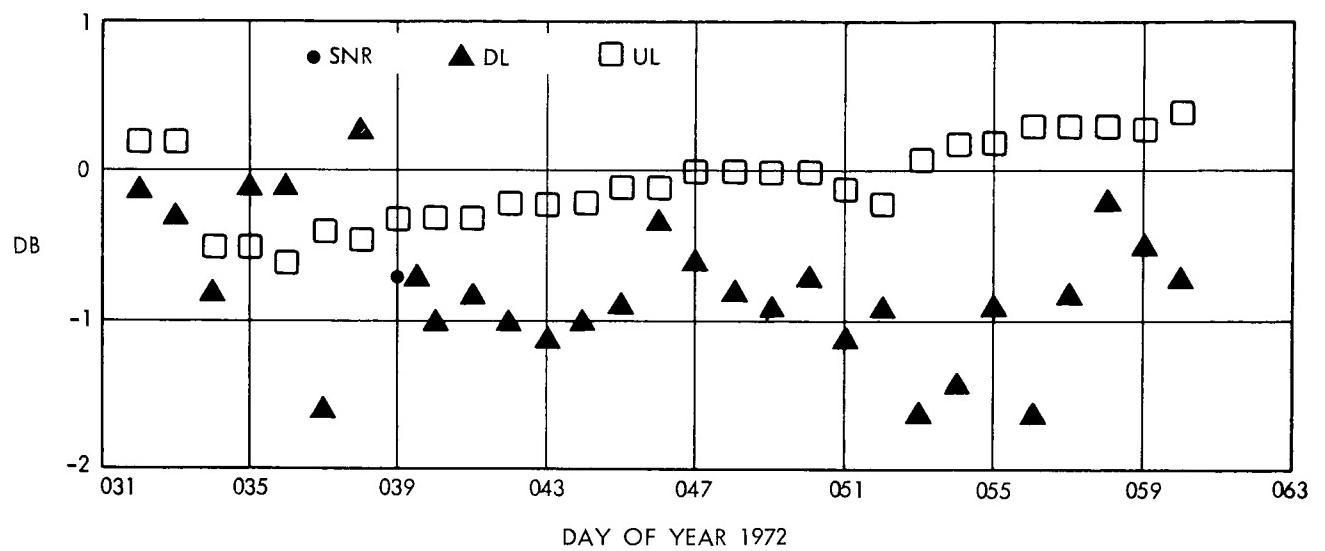


Fig. 19. Residual data plot for DSS 12, February 1972

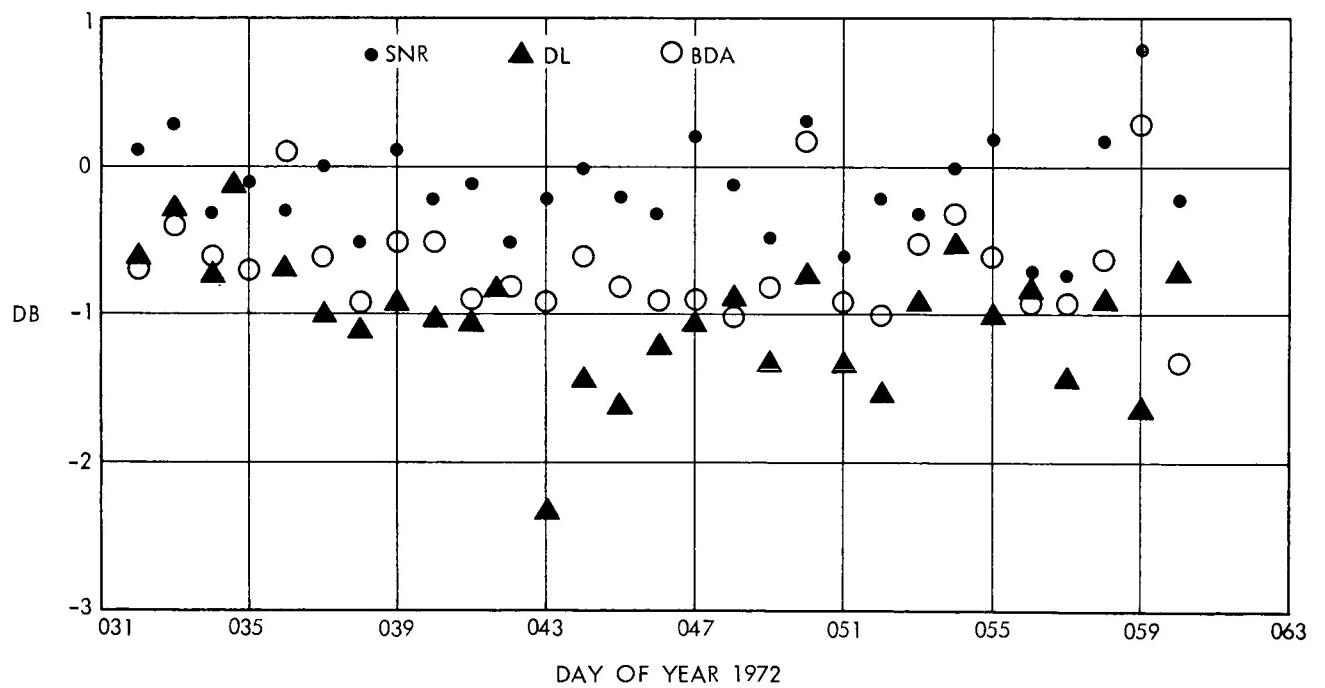


Fig. 20. Residual data plot for DSS 14, February 1972

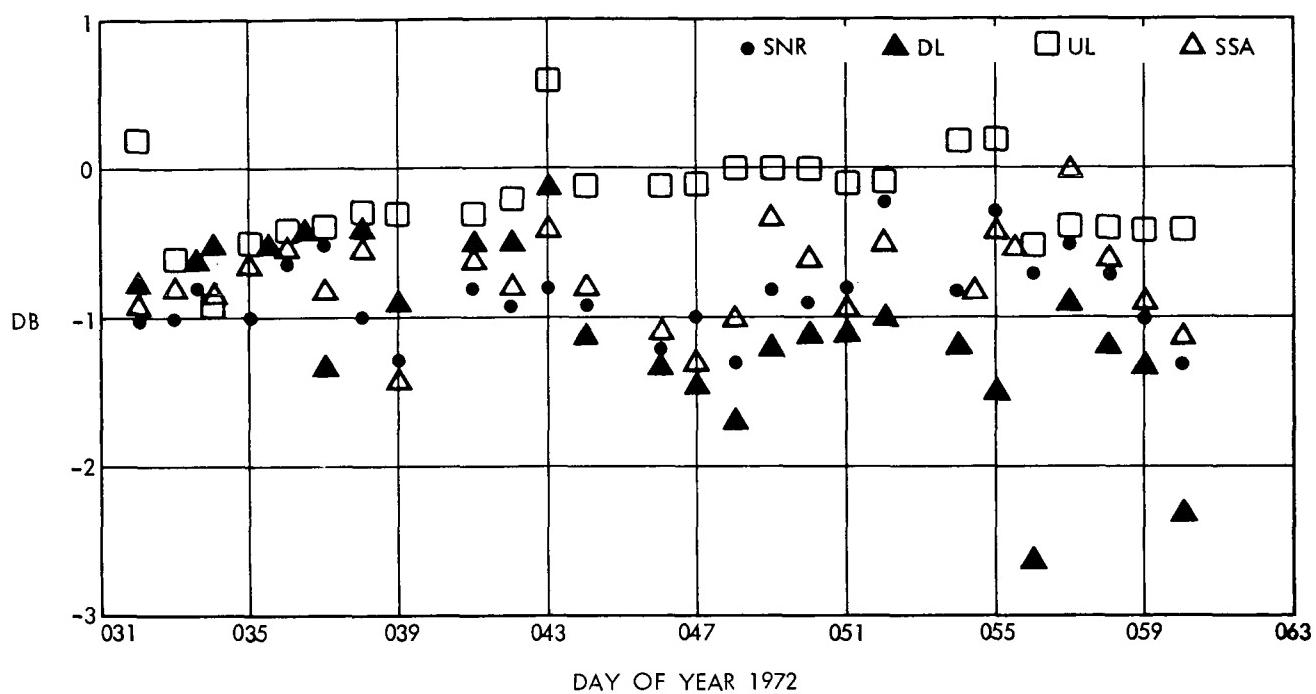


Fig. 21. Residual data plot for DSS 41, February 1972

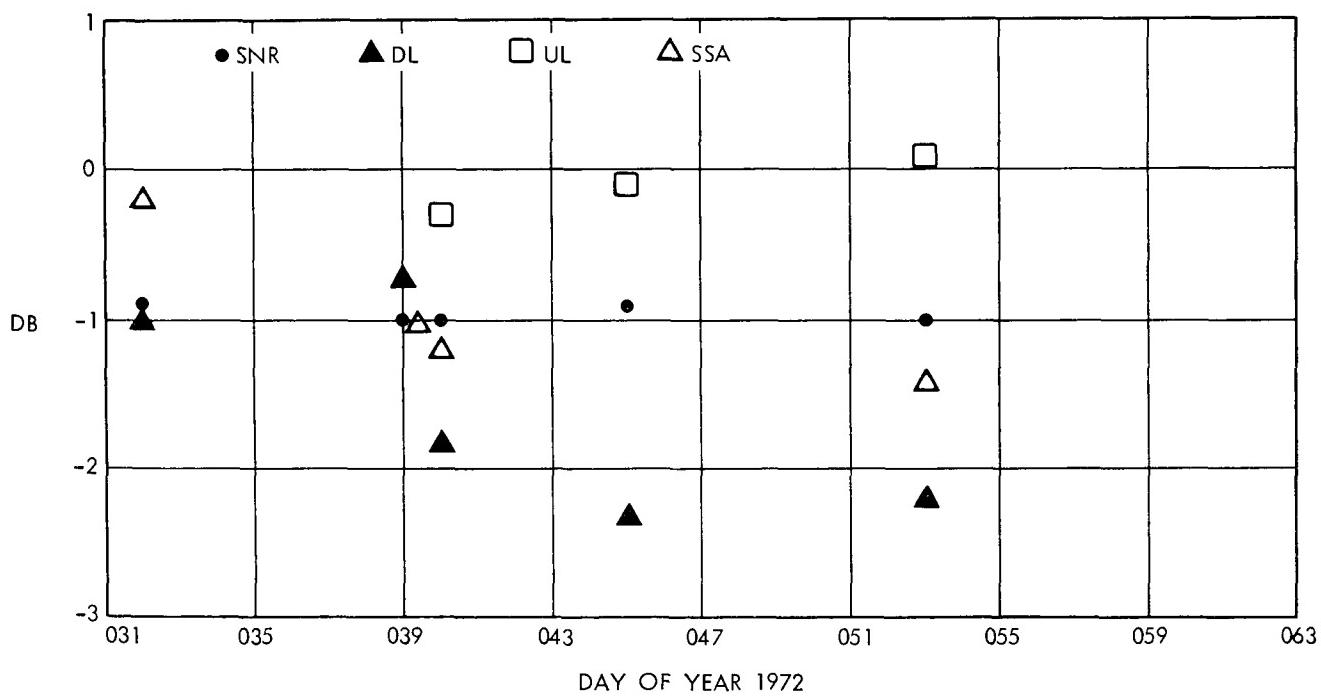


Fig. 22. Residual data plot for DSS 42, February 1972

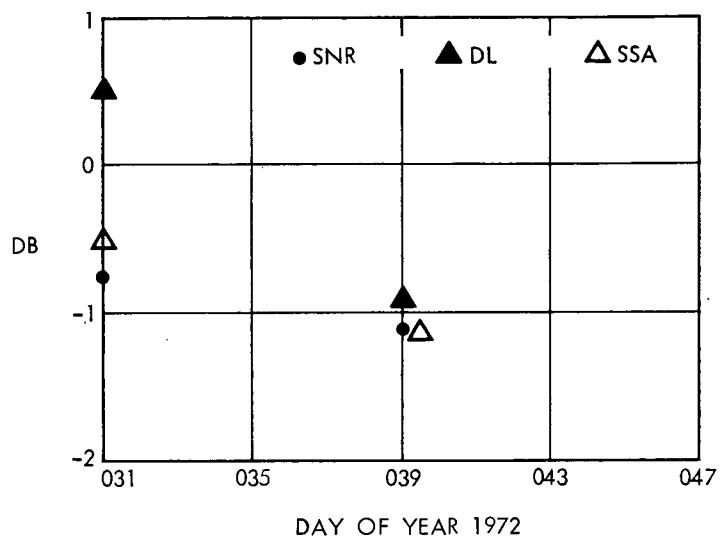


Fig. 23. Residual data plot for DSS 51, February 1972

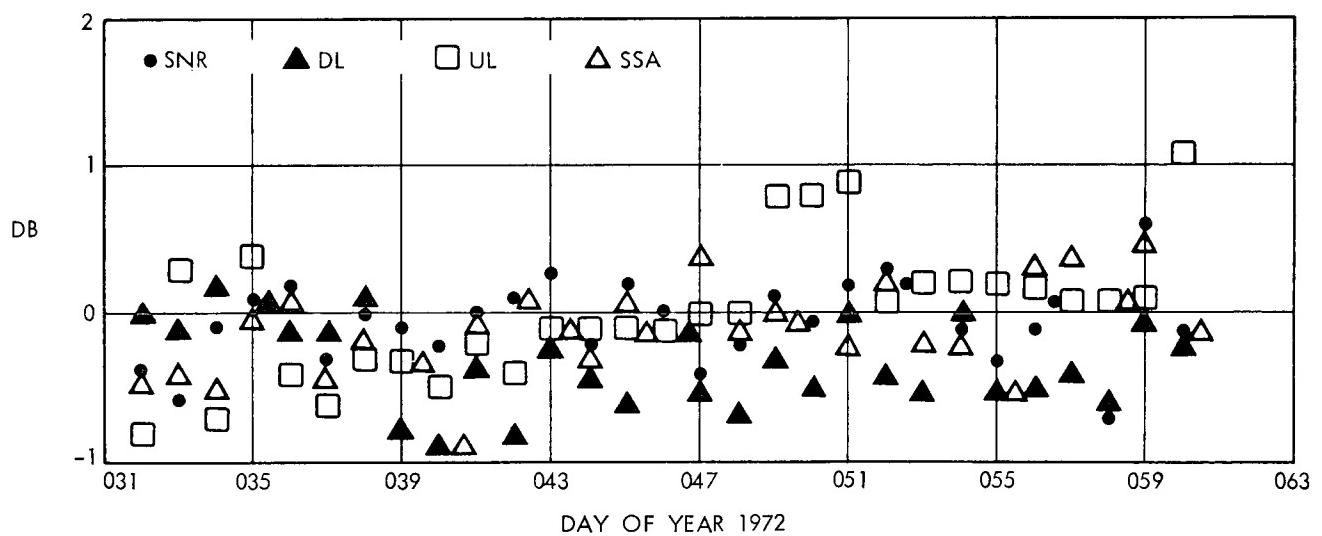


Fig. 24. Residual data plot for DSS 62, February 1972

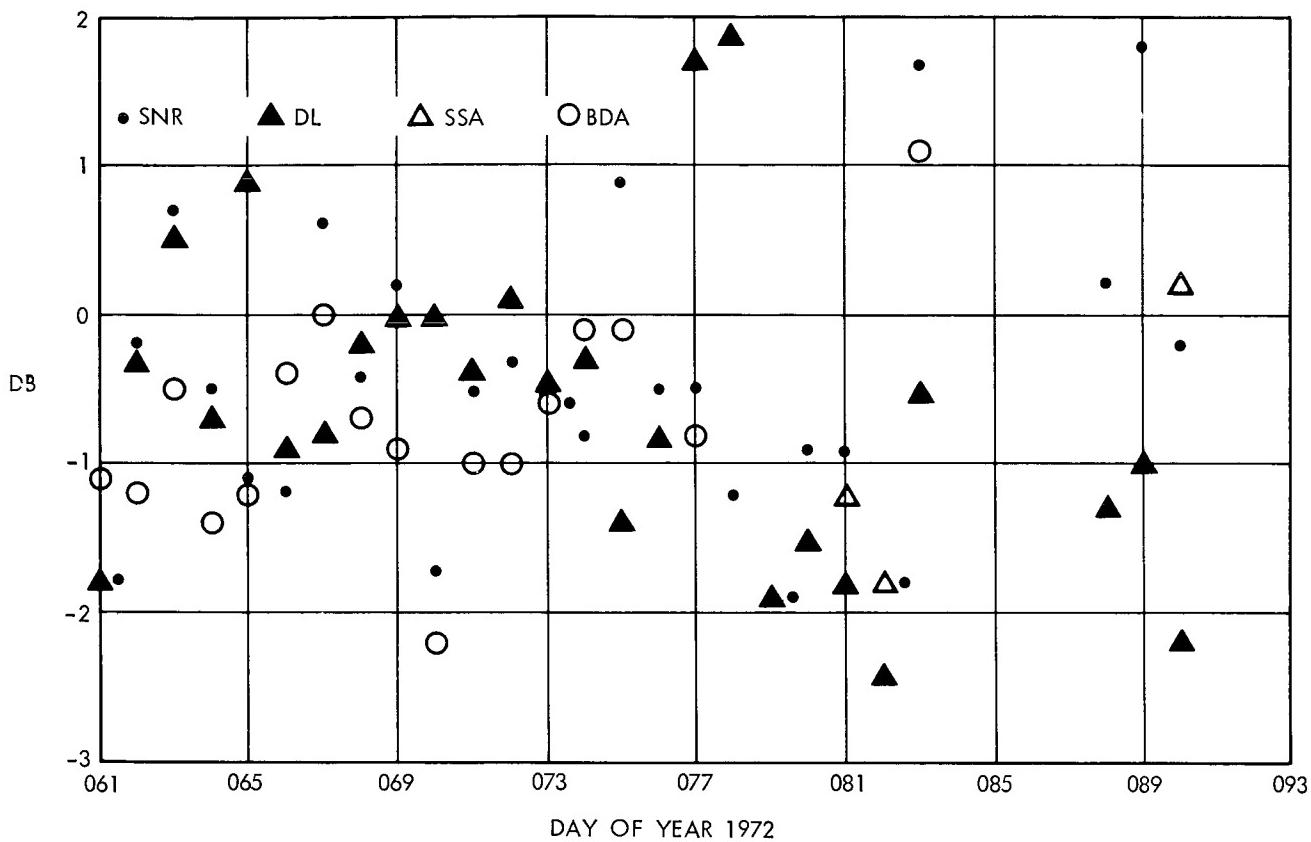


Fig. 25. Residual data plot for DSS 14, March 1972

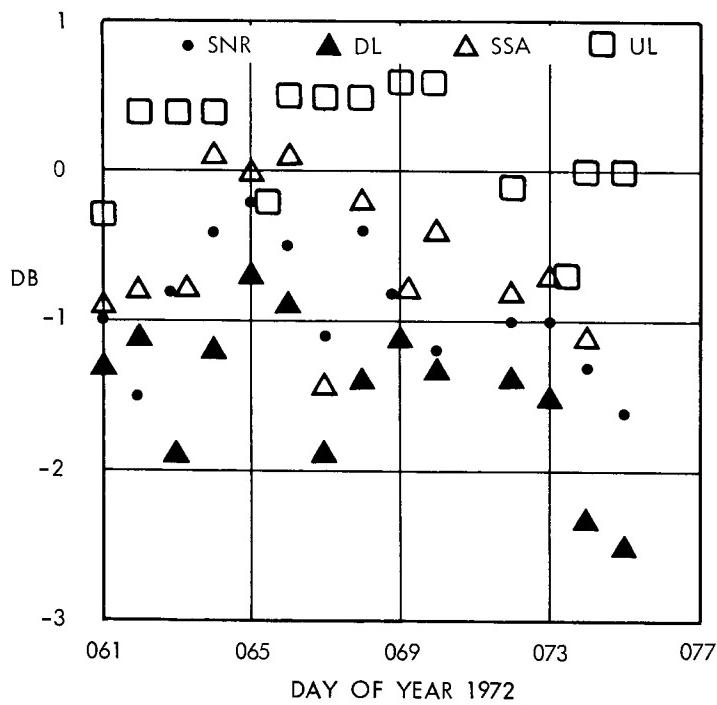


Fig. 26. Residual data plot for DSS 41, March 1972

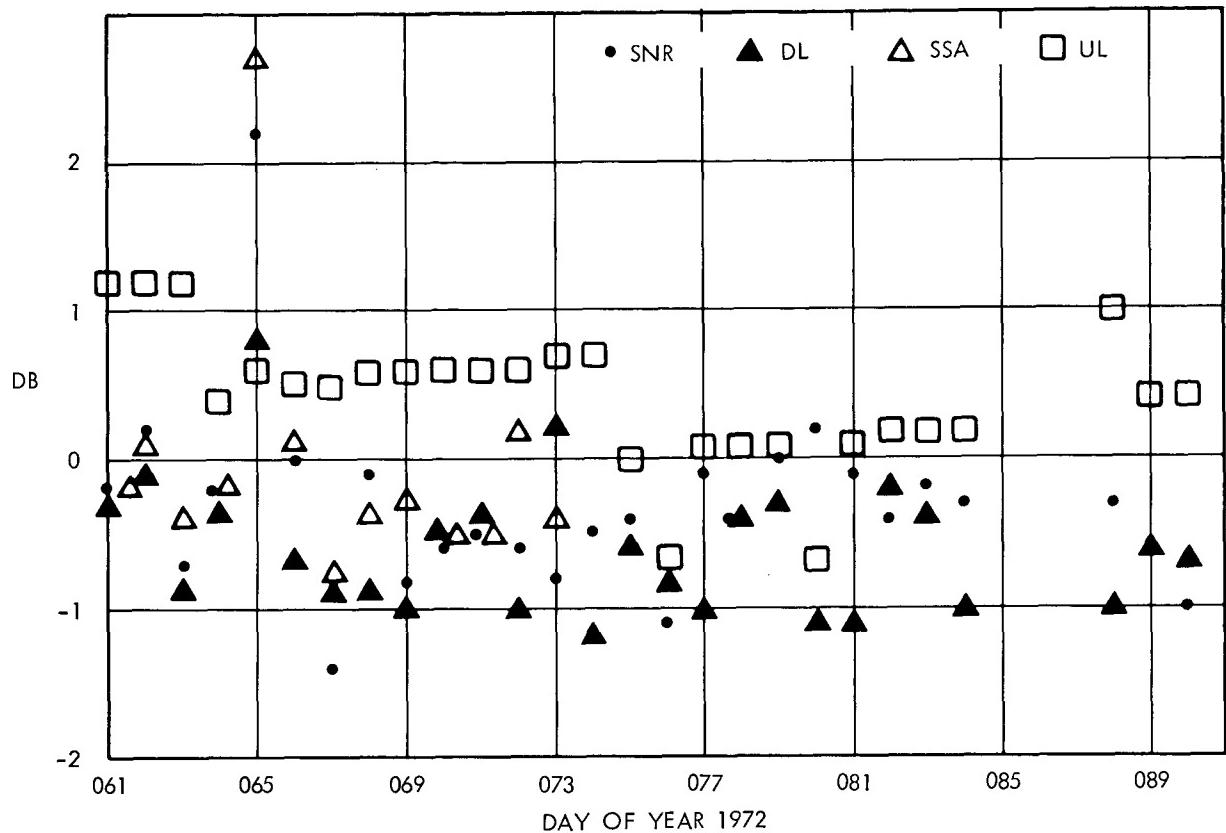


Fig. 27. Residual data plot for DSS 62, March 1972

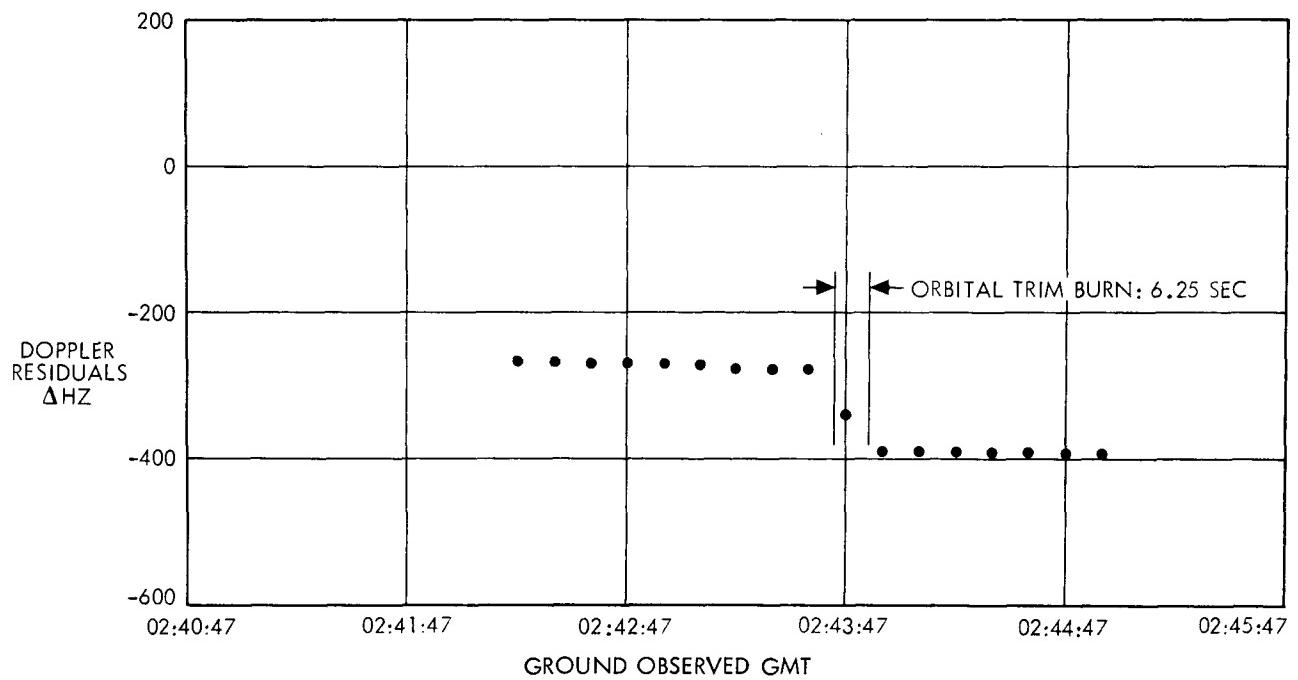


Fig. 28. Doppler residual shift during orbital trim maneuver

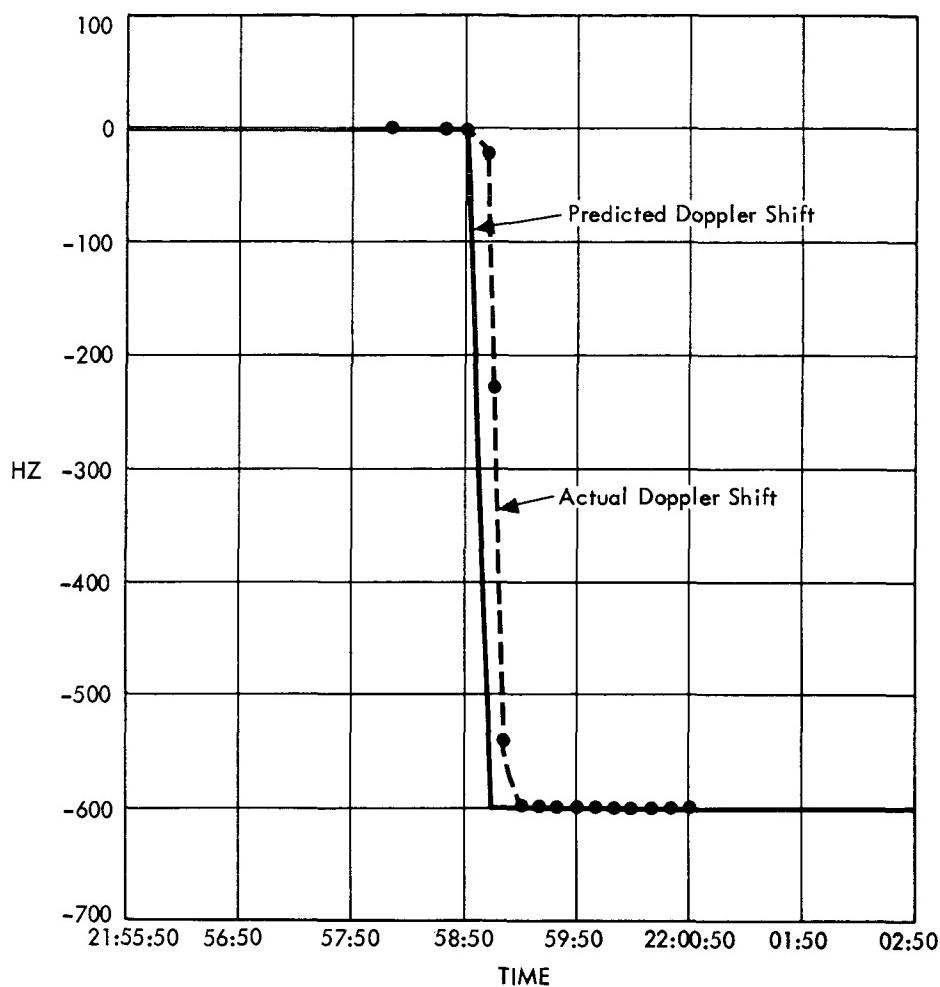


Fig. 29. Second orbital trim maneuver

OCCULTATION EVENTS DAY 348 GOLD.   
 HANOVER TO OCCULT TSF 5534  
 ENTER OCC AT 13 27 59  
 TXR OFF AFTER ENTER OCC  
 TXR ON AT 14 03 00 FREQ 5246  
 TUNE AT 60 HZ-MIN TO TSF 5256  
 EXIT OCC AT 14 04 09

Fig. 30. Example of occultation predicts message

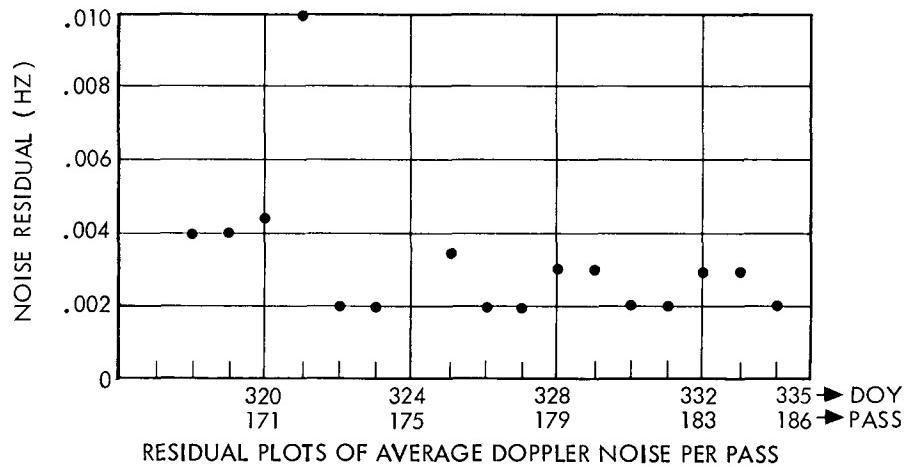
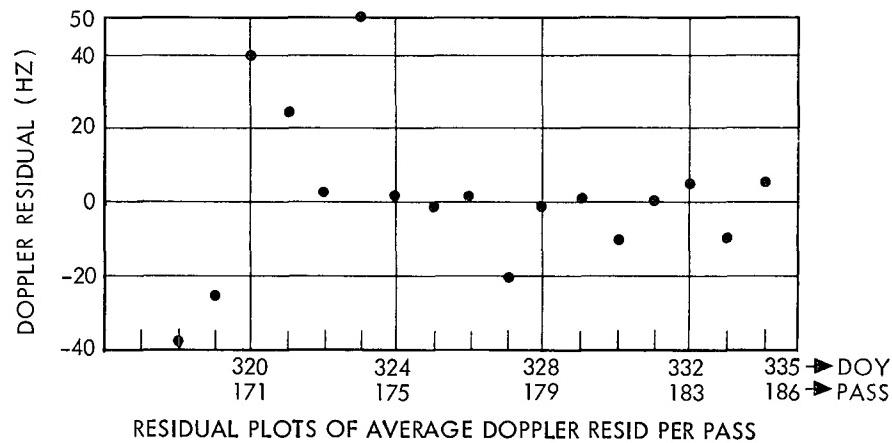


Fig. 31. DSS 12 average residual plots, November 14-30, 1971

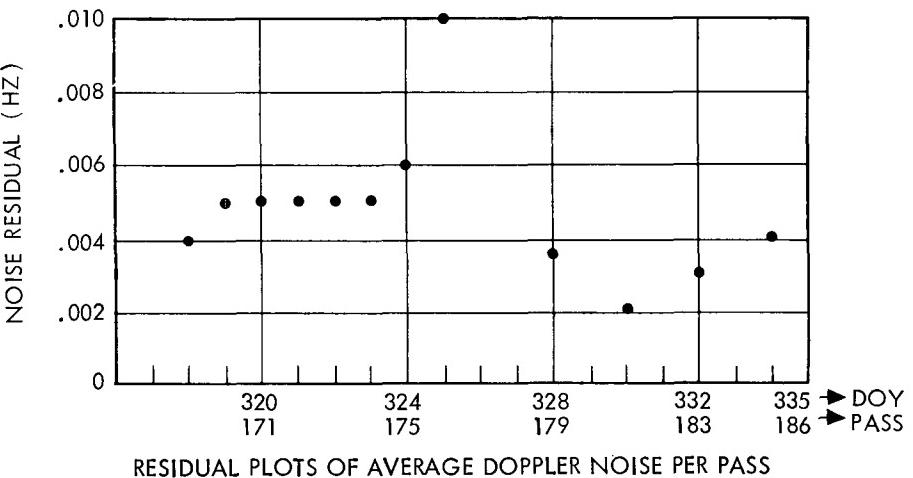
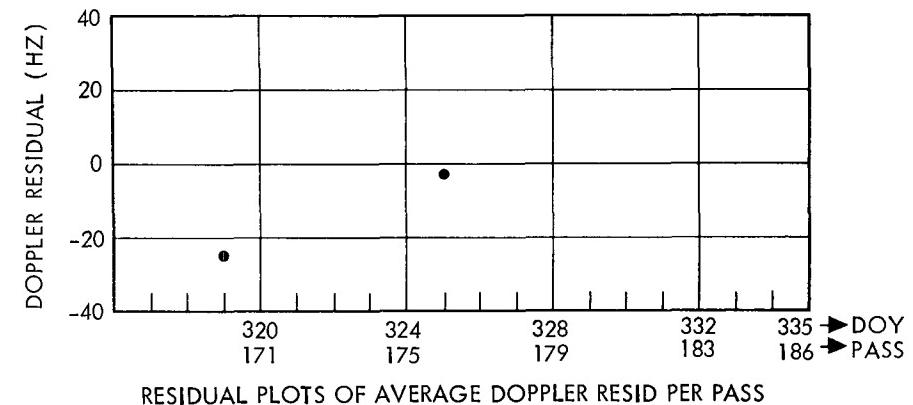


Fig. 32. DSS 14 average residual plots, November 14-30, 1971

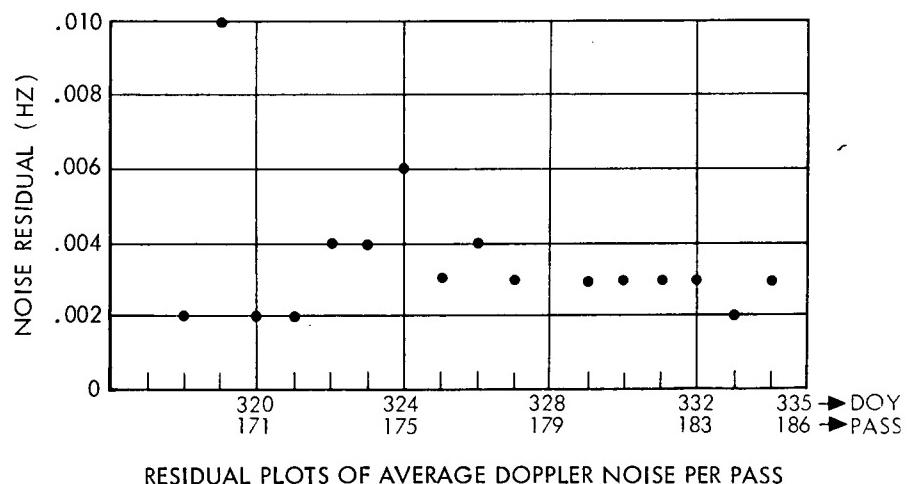
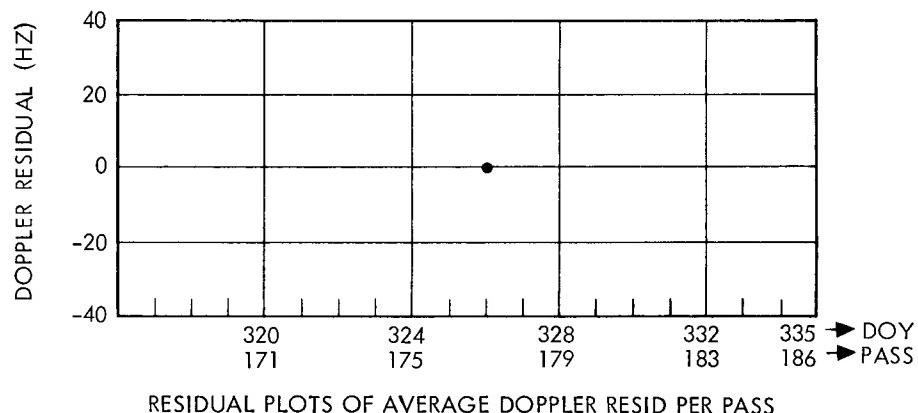
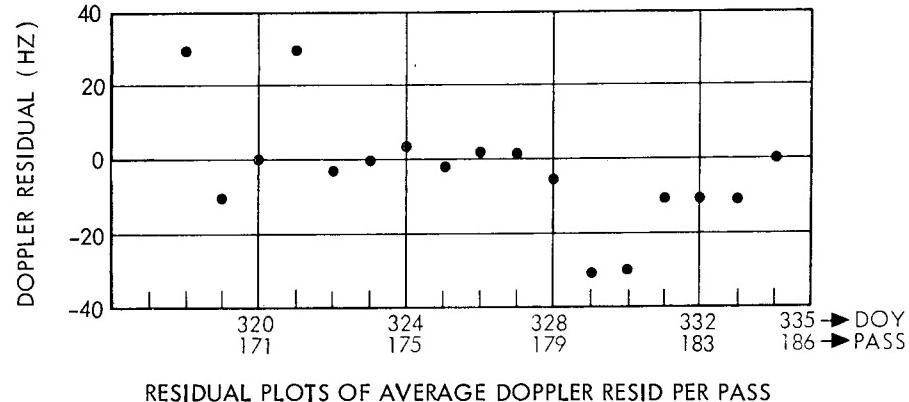


Fig. 33. DSS 41 average residual plots, November 14-30, 1971

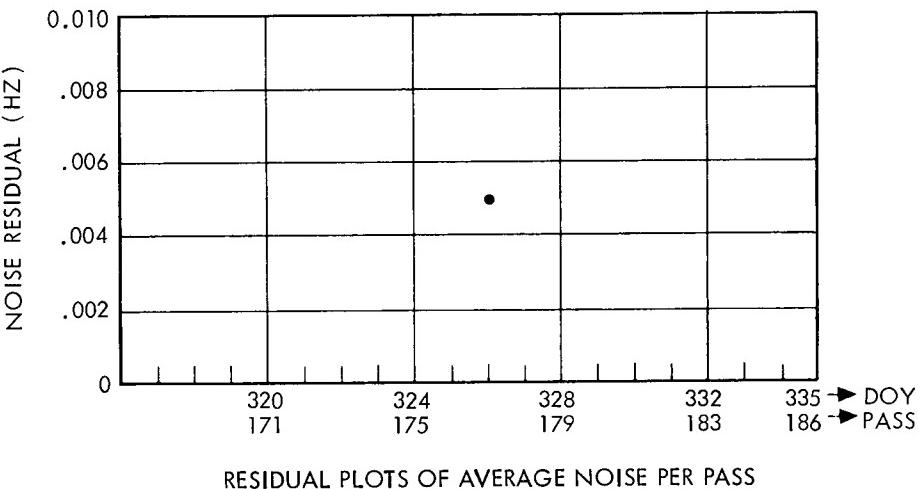


Fig. 34. DSS 51 average residual plots, November 14-30, 1971

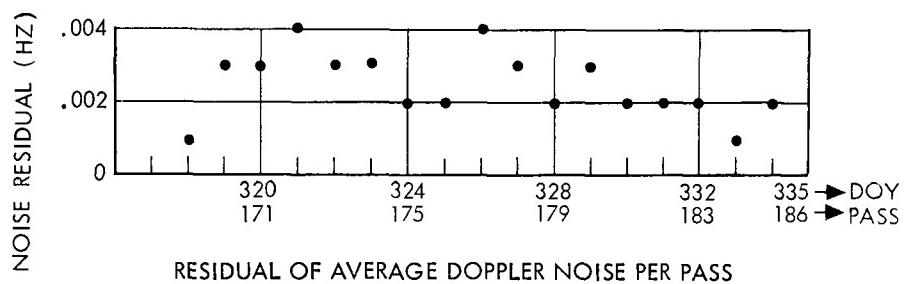
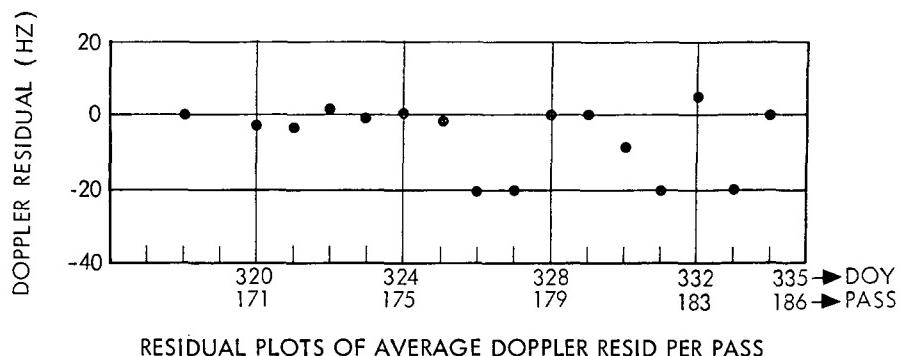


Fig. 35. DSS 62 average residual plots, November 14-30, 1971

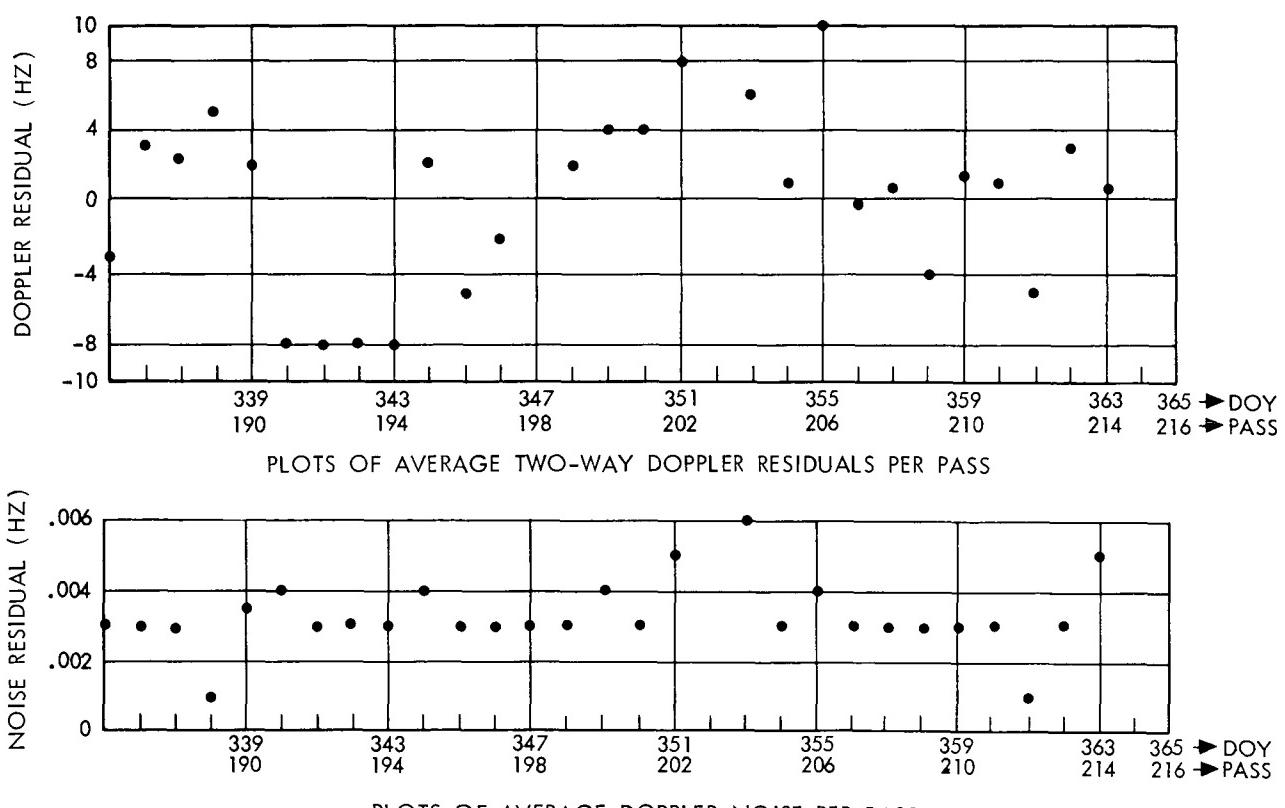


Fig. 36. DSS 12 average residual plots for December 1971

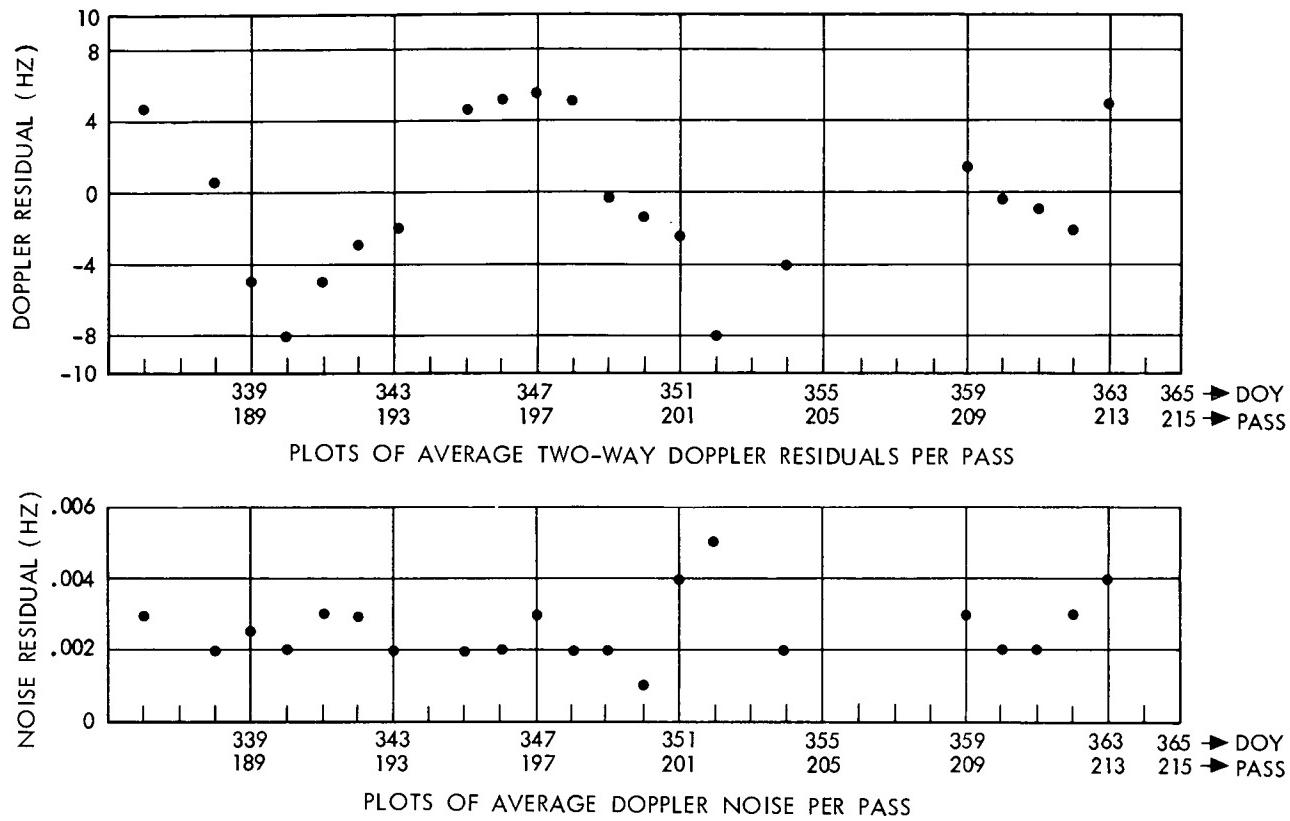


Fig. 37. DSS 41 average residual plots for December 1971

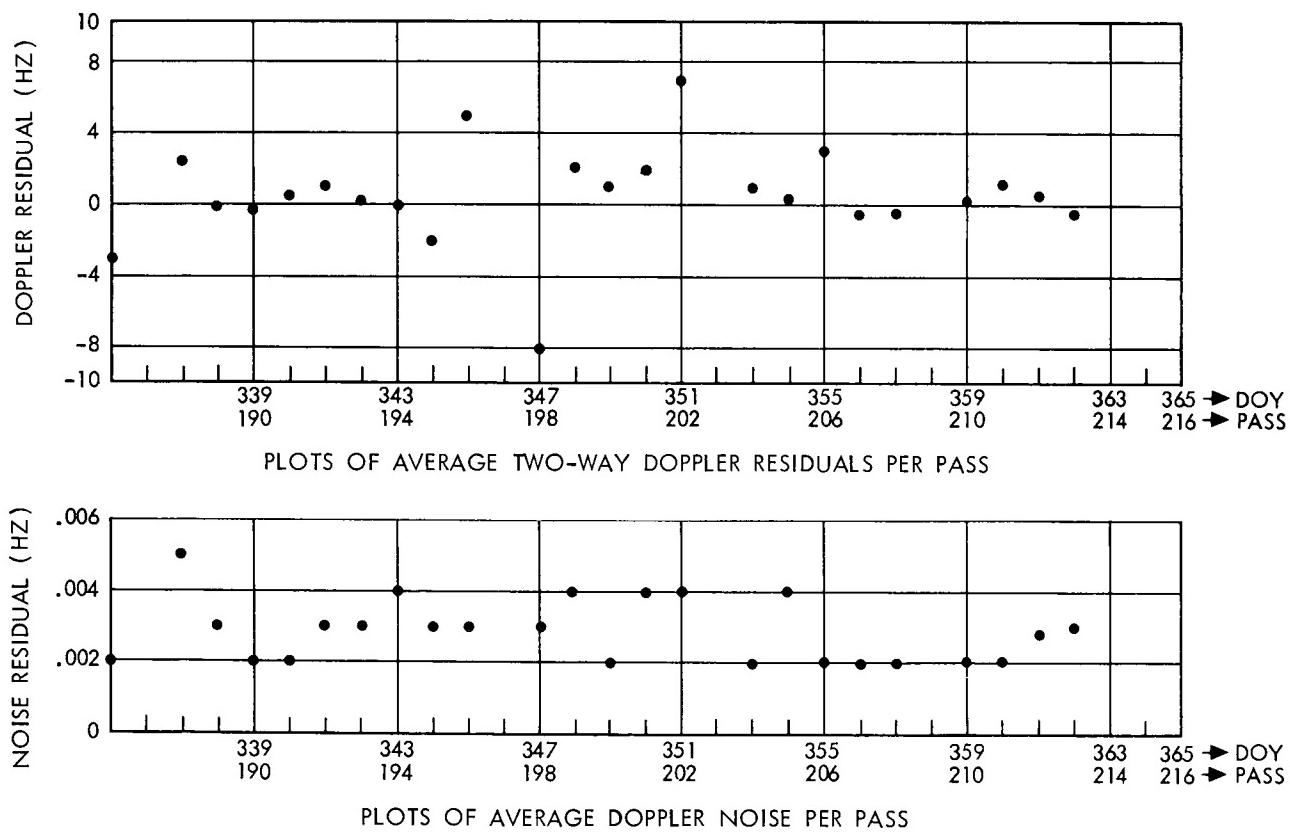


Fig. 38. DSS 62 average residual plots for December 1971

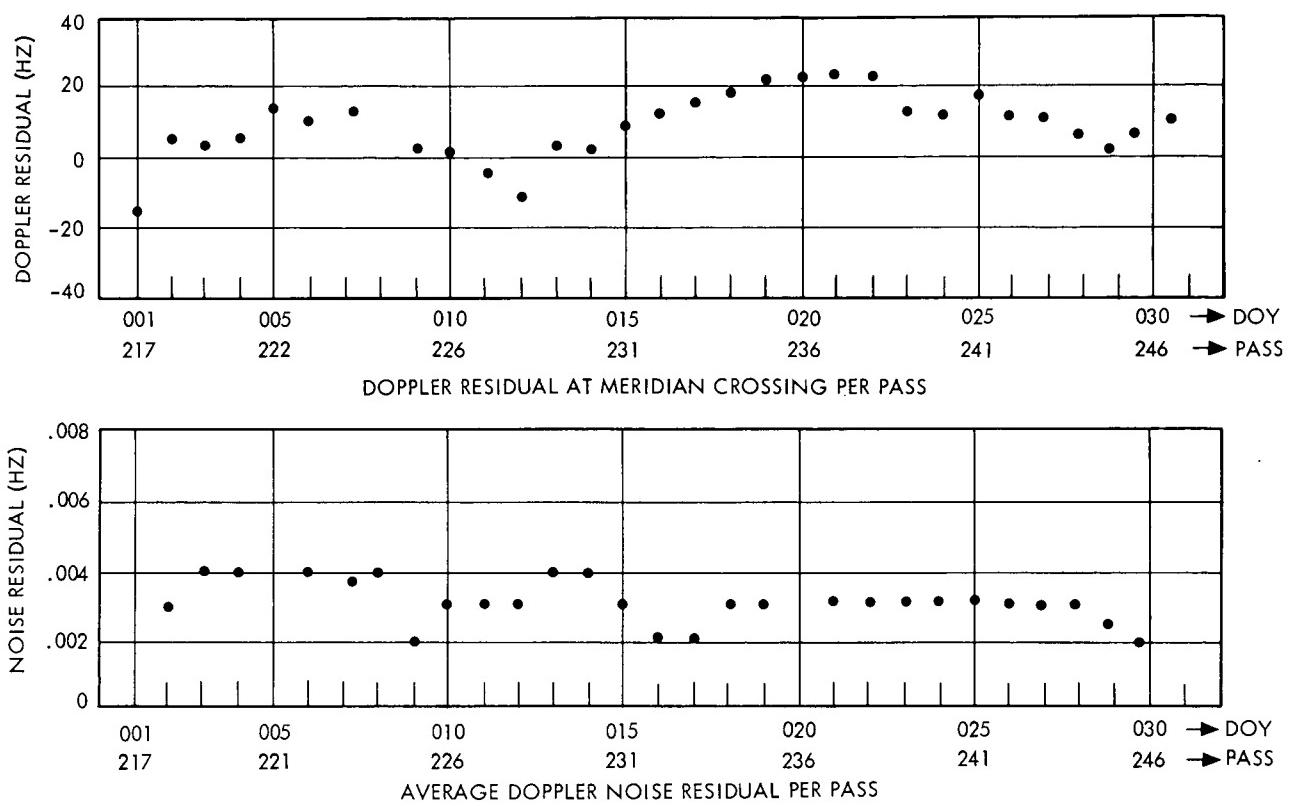


Fig. 39. Average DSS 12 residual plots for January 1972

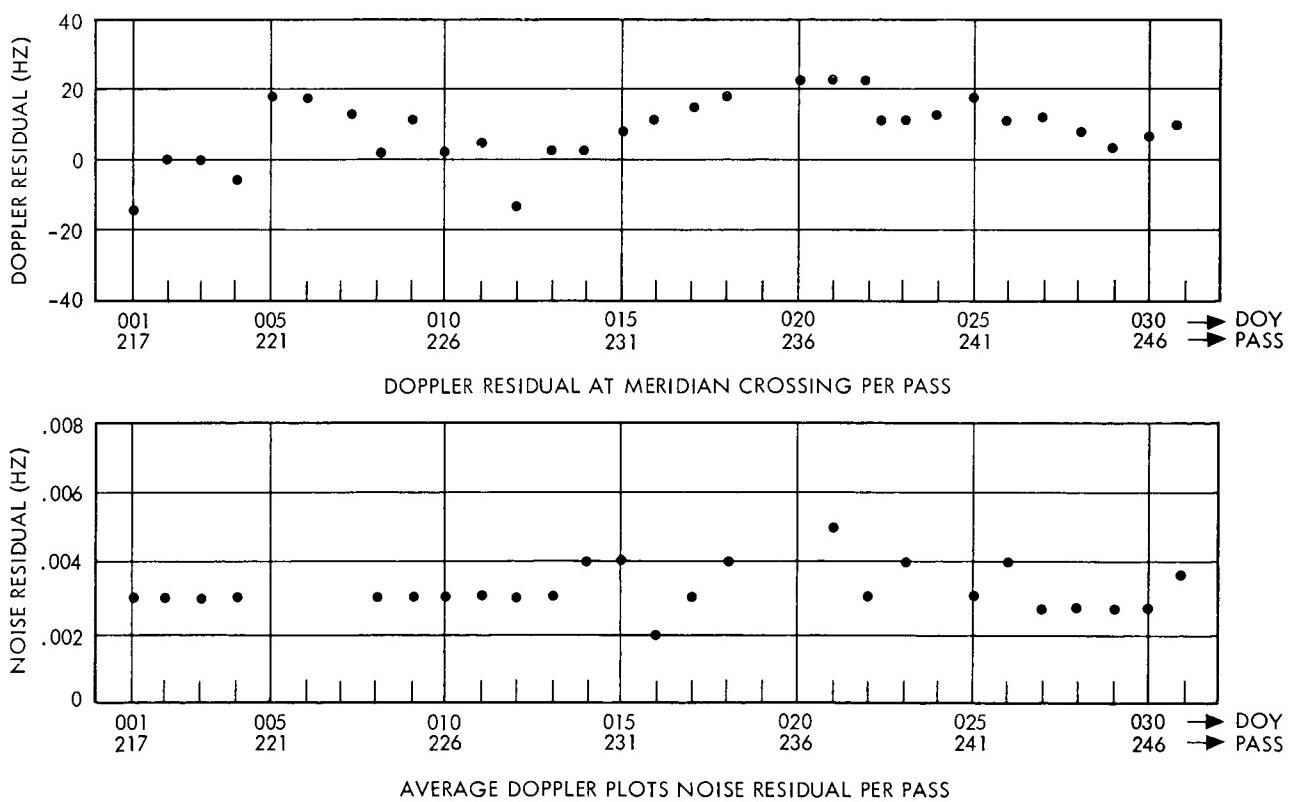


Fig. 40. Average DSS 14 residual plots for January 1972

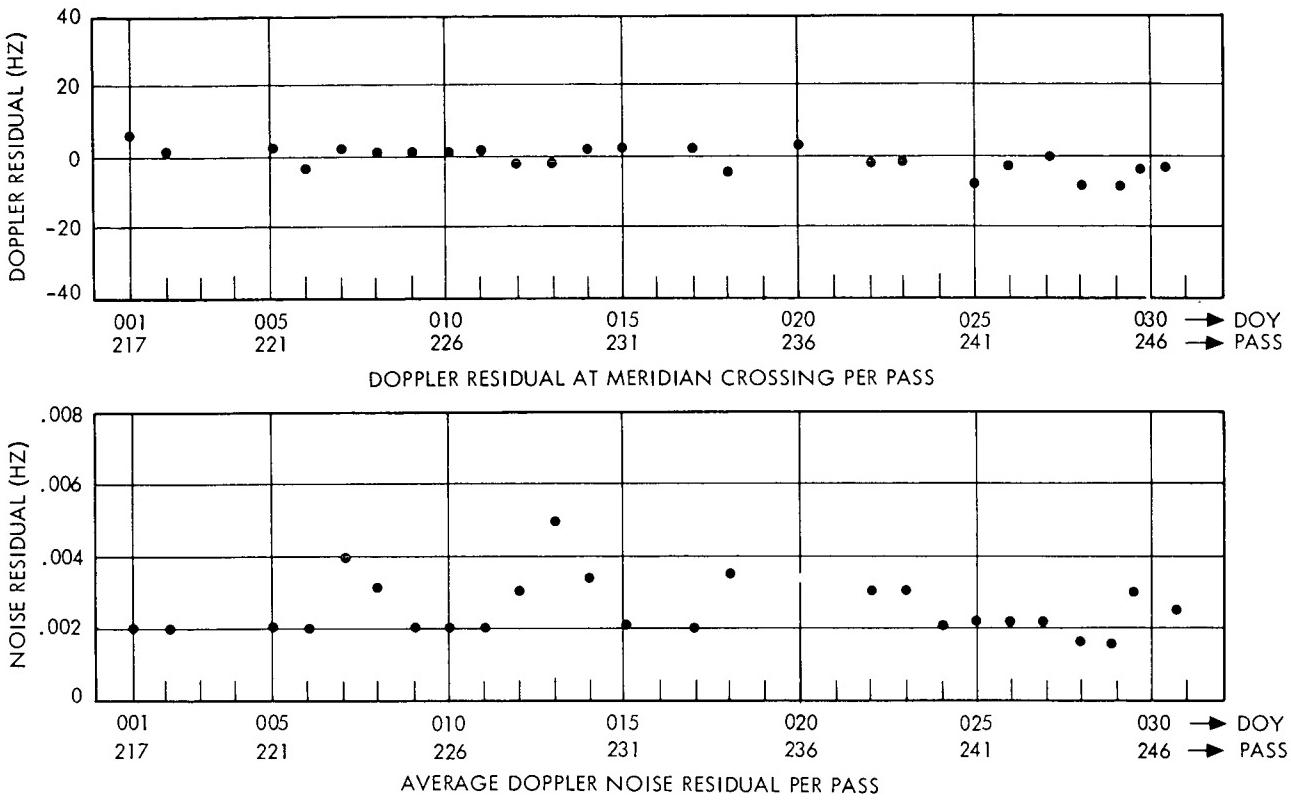


Fig. 41. Average DSS 41 residual plots for January 1972

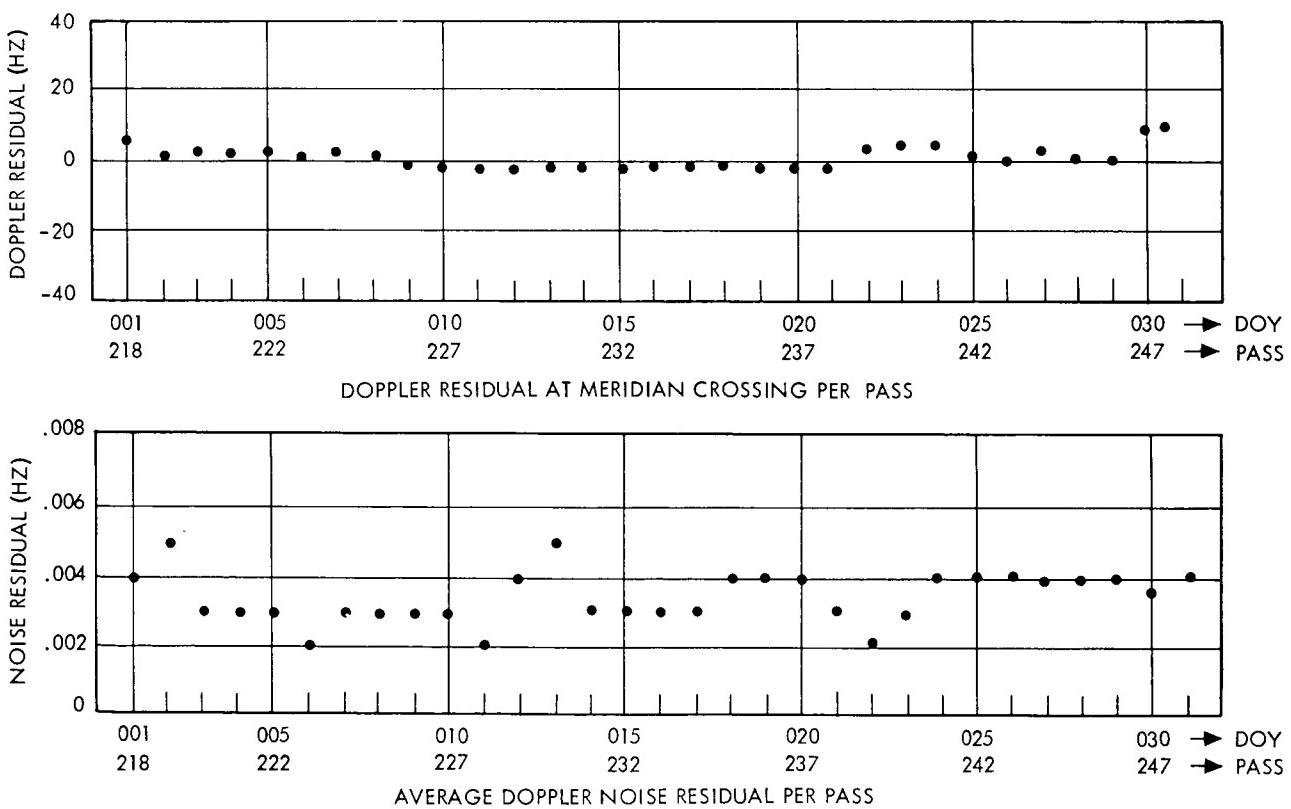


Fig. 42. Average DSS 62 residual plots for January 1972

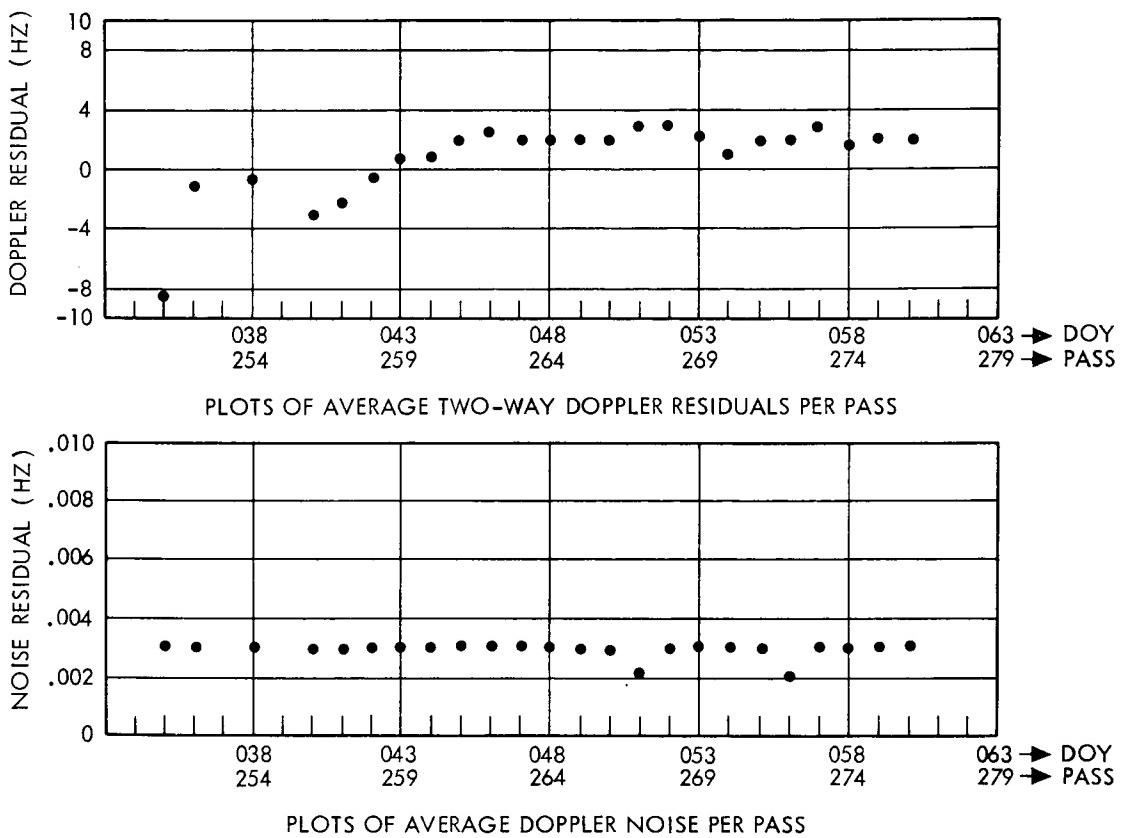


Fig. 43. Average DSS 12 residual plots for February 1972

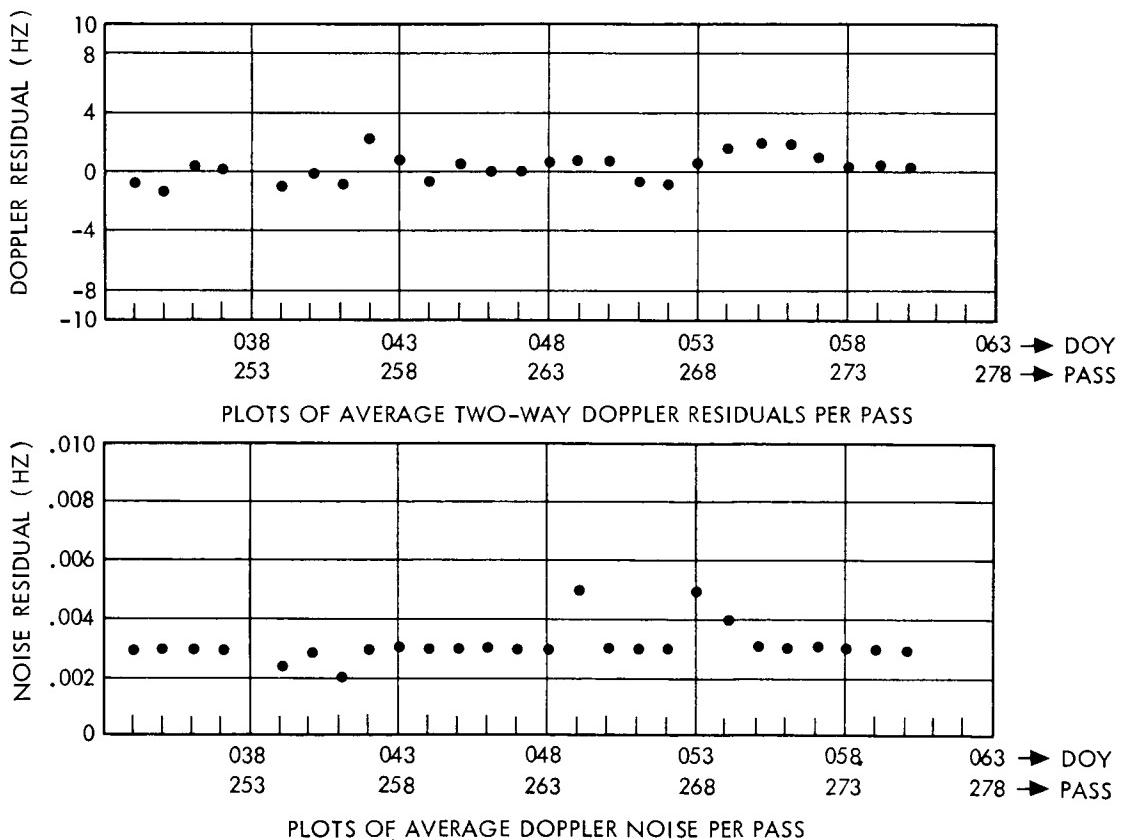


Fig. 44. Average DSS 41 residual plots for February 1972

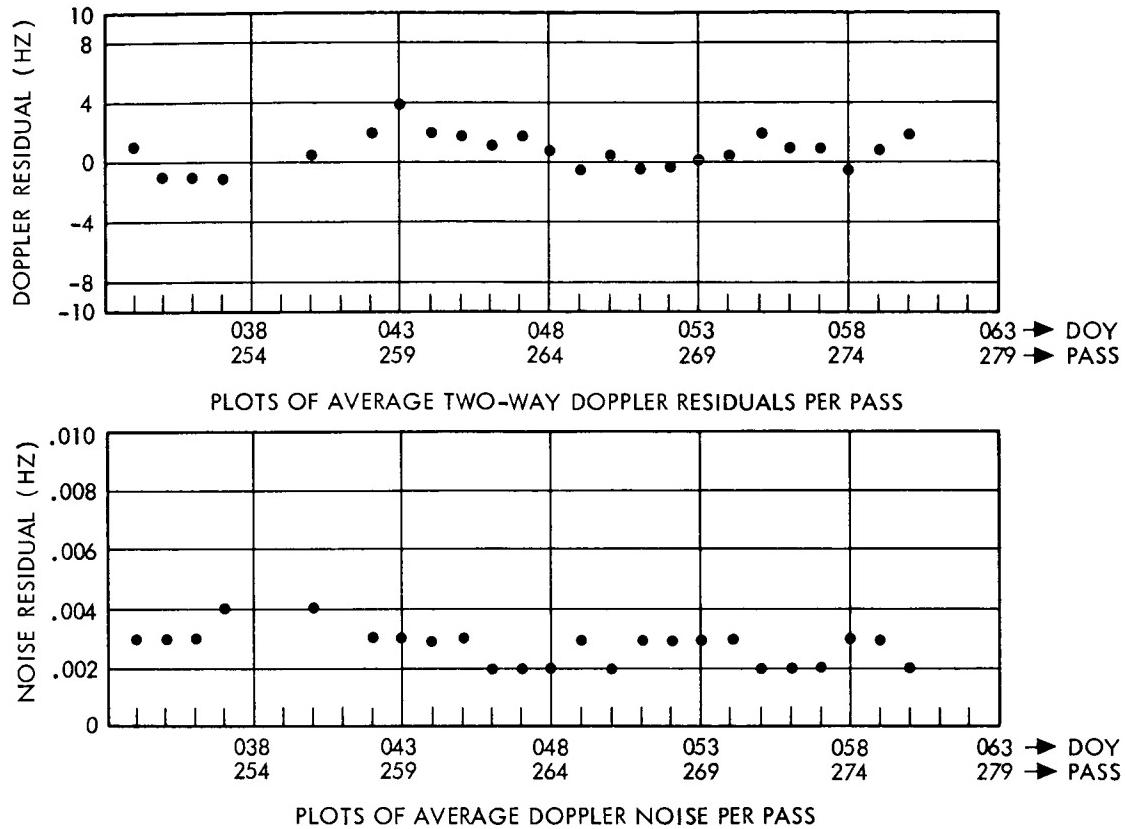


Fig. 45. Average DSS 62 residual plots for February 1972

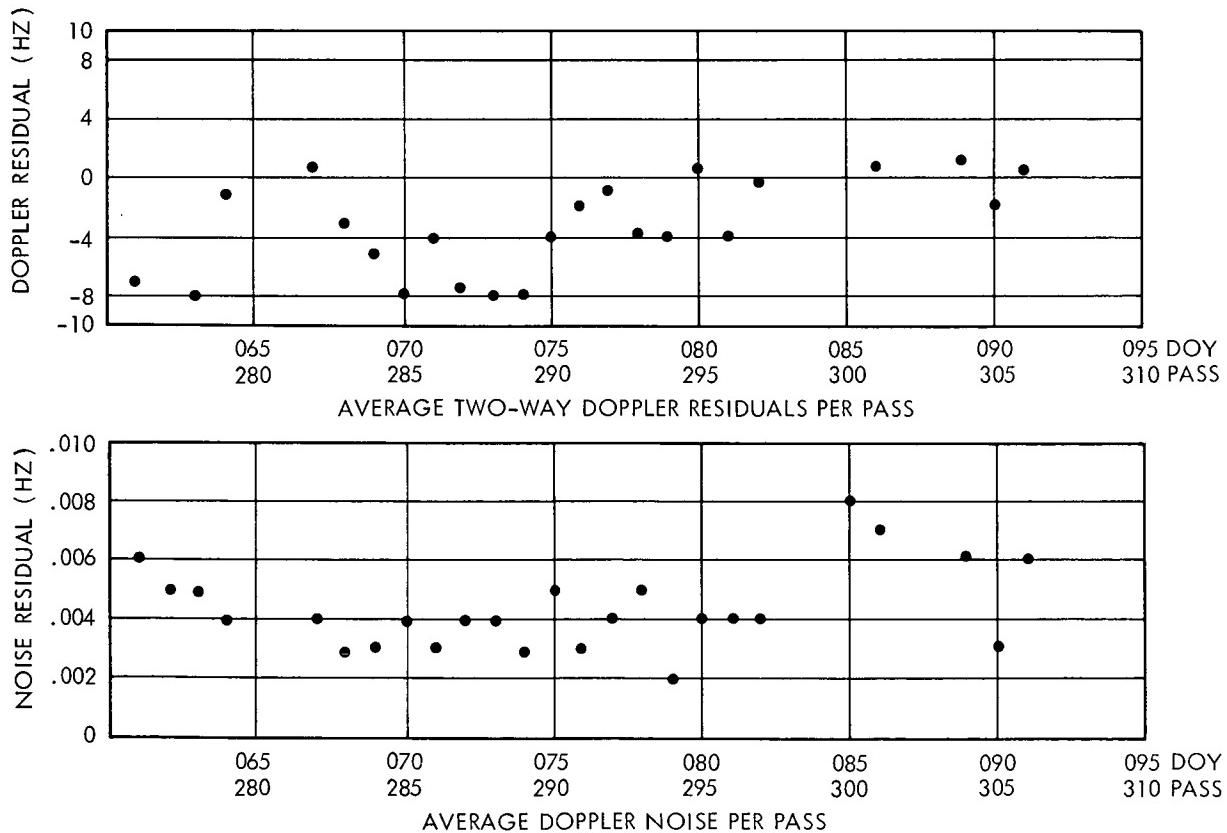


Fig. 46. Average DSS 14 residual plots for March 1972

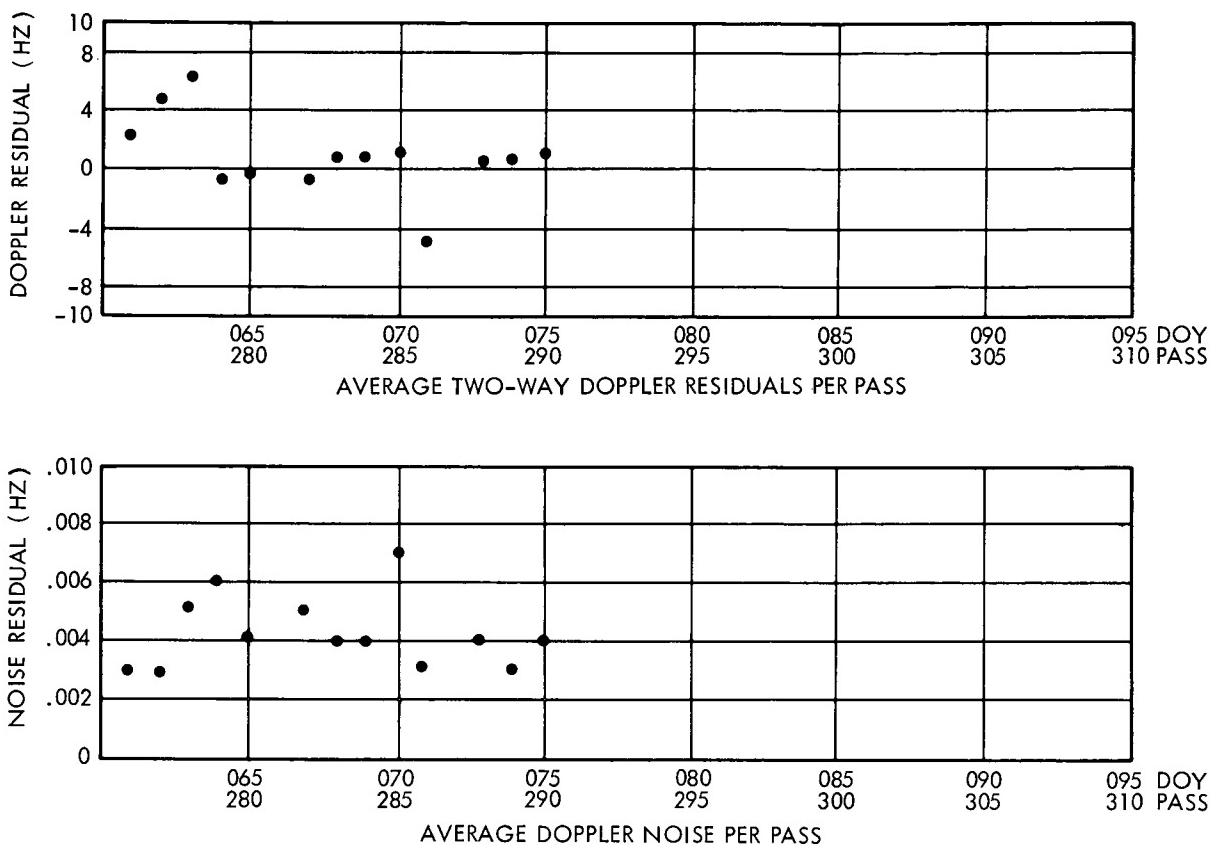


Fig. 47. Average DSS 41 residual plots for March 1972

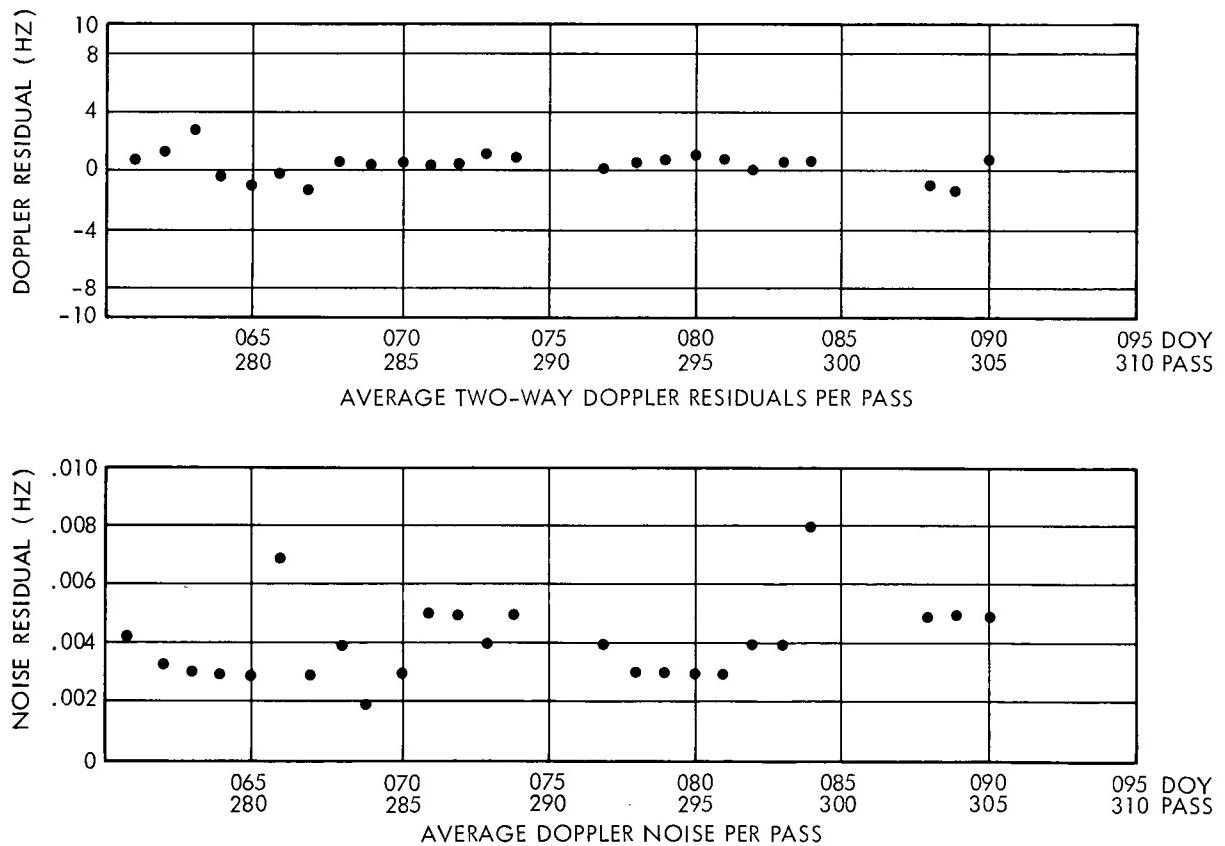


Fig. 48. Average DSS 62 residual plots for March 1972

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APPENDIX

DETAILS OF PASS CHRONOLOGY\*

PASS 0168	NOV 14,1971	NOV 14,1971	DAY 318	318	
DSS 41	A.O.S. 318/0334	L.O.S. 318/1611	COMMANDS	25	RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 0700-1330Z  
 CMDS-0707-1040Z TO 1043-1102Z  
 0739-0743Z-DIS RELOADED-NO DR  
 0254Z-RECALL RESPONSE DATA BLOCKS HANGING UP AT STA. RELOAD  
 OF CMD PORTION OF TCP-DR C-048  
 TFR 41/TDH/A58645 TDH VCO COUNTER: INCORRECT COUNTS.  
 SCIENCE BIT RATE FOR PASS WAS 33 1/3BPS  
 IN TAPE TENSION ARMS. TFR/41/DIS/A58647 DIS HUNG UP:  
 WATCHDOG TIMER ALARM. DR.C-048 NAT COM.  
 ALL COMMAND MESSAGES OUTPUT FROM STATION HANGING UP IN  
 OUTPUT BUFFER

PASS 0168	NOV 14,1971	NOV 14,1971	DAY 318	318	
DSS 42	A.O.S. 318/0816	L.O.S. 318/1503	COMMANDS	0	RANGING NIL

DEVIATIONS OR ANOMALIES

BDA PREDIC 20.0 ACTUAL 18.6 SCIENCE BIT RATE AT 50 BPS  
 AOS LATE DUE TO NO PRDX  
 OCCULTATION 1328Z RE-ACQ 1405Z

PASS 0169	NOV 14,1971	NOV 15,1971	DAY 318	319	
DSS 62	A.O.S. 318/1410	L.O.S. 319/0013	COMMANDS	18	RANGING NIL

DEVIATIONS OR ANOMALIES

142646-220000Z-2-WAY 18 CMDS  
 NOTE: ANT OFF 42 IN POINTING ANGLE (HA) DR1548  
 NOTE: WHEN PB MODE STARTED SSA GOT FALSE LOCK AND TCP HAD  
 TO BE RE-INITIALIZED.  
 BDA PREDIC 7.1 ACTUAL 6.8 SCIENCE BIT RATE AT 50 BPS

PASS 0169	NOV 14,1971	NOV 15,1971	DAY 318	319	
DSS 12	A.O.S. 318/2120	L.O.S. 319/0755	COMMANDS	181	RANGING -NIL

DEVIATIONS OR ANOMALIES

\* INVALID, RCVR IN MGC UNTIL SHORTLY BEFORE PREDICTED TEX  
 2-WAY TRK: 2213-0202Z AND 0311-0714Z-CMD XMIT: 2300-0142Z  
 0727-0732Z, 360 DOWN FOR WARM RESTART-DR2368 AND 0315-0648Z  
 STANDARD PLAYBACK PROCEDURE AT 8.1 AND 16.2 KBPS

\* Extracted from monthly DSN Operations Reports for Mariner Mars 1971 Project. For more detailed information, refer to the pass summaries in the individual monthly DSN Operations Reports for this period.

PASS 0169 NOV 14,1971 NOV 15,1971 DAY 318 319  
-----  
DSS 14 A.O.S. 318/2145 L.O.S. 319/0703 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

DIS "RED" AT DSS 14  
ENGINEERING DATA RECEIVED FROM STATION 12: STANDARD PLAYBACK

PASS 0169 NOV 15,1971 NOV 15,1971 DAY 319 319  
-----  
DSS 41 A.O.S. 319/0655 L.O.S. 319/1611 COMMANDS 20 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-0715-1438Z  
CMDS-0725-1420Z  
BDA PREDIC 19.9 ACTUAL 18.7 SCIENCE DATA AT 50 BPS

PASS 0170 NOV 15,1971 NOV 15,1971 DAY 319 319  
-----  
DSS 62 A.O.S. 319/1402 L.O.S. 319/2400 COMMANDS 17 RANGING -NIL

DEVIATIONS OR ANOMALIES

\*\* SEE TLM LOG IN PASS FOLDER  
CMDNG-1512-2225Z  
1745-1802Z-DIS DOWN-RECONFIG. APS TC TAPE DRIVE-RELOADED  
DIS-NO DR  
OPR. ERROR ON MISINTERPRETATION OF SYNLO PREDICTS-DR1553  
2-WAY TRK: 1509-2230Z  
BDA PREDIC 19.1 ACTUAL 18.5 SCIENCE BIT RATE AT 50 BPS

PASS 0170 NOV 15,1971 NOV 16,1971 DAY 319 320  
-----  
DSS 12 A.O.S. 319/2110 L.O.S. 320/0753 COMMANDS 18 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 0401-0745Z CMD TIME: 0412-0732Z  
0115-0126Z, 360 DOWN-WARM IPL REQ, DR2444  
0212-0225Z, 360 DOWN-DR2447  
0639-0702Z, 360 DOWN-1052'S LOCKED-OUT, IPL REQ, DR2448  
STANDARD PLAYBACK PROCEDURE

PASS 0170 NOV 16,1971 NOV 16,1971 DAY 320 320  
-----  
DSS 41 A.O.S. 320/0648 L.O.S. 320/1610 COMMANDS 280 RANGING -NIL

DEVIATIONS OR ANOMALIES

1510-1540Z, 360/75 DOWN-SYSTEM RELOAD OF NEW VERSION 11.4-  
NO DR-SCHEDULED  
DR 1558 TFR 41/RCV/A56651. EXCITER LOOP BECAME UNSTABLE AT  
140400 UNTIL TXR OFF AT 151059. DR1556 TRAKON ORDERED  
TRANSMITTER OFF IN ERROR. TIME OFF 084741 CN 084814.  
BDA PREDIC 19.7 ACTUAL 18.5 SCIENCE BIT RATE 50 BPS

PASS 0170 NOV 16,1971 NOV 17,1971 DAY 320 321  
-----  
DSS 14 A.O.S. 320/2139 L.O.S. 321/0737 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

DIS LOG TAPE RED-UNABLE TO ENABLE-NO DR  
2301Z-DIS LOG TAPE ENABLED  
0500-0509Z, 360 DOWN, LOCKED-OUT OF 1052 CONSOLE, DR2455  
ENGINEERING DATA RECEIVED FROM STATION 12:STANDARD PLAYBACK

PASS 0170 NOV 16,1971 NOV 17,1971 DAY 320 321  
-----  
DSS 14 A.O.S. 320/2144 L.O.S. 321/0736 COMMANDS 21 RANGING -NIL

DEVIATIONS OR ANOMALIES

DIS LOG TAPE RED-NOT ABLE TO ENABLE-NO DR  
0115-0126Z, 360 DOWN-WARM IPL REQ-DR2444  
0212-0225Z, 360 DOWN-COLD IPL REQ-DR2447  
0639-0702Z, 360 DOWN, 1052'S LOCKED-OUT, IPL REQ, DR2448  
2-WAY TRK: 2243-0215Z. CMD TIME: 2310-0158Z  
BDA PREDIC 7.3 ACTUAL 6.6 SCIENCE BIT RATE 50 BPS

PASS 0171 NOV 16,1971 NOV 17,1971 DAY 320 321  
-----  
DSS 62 A.O.S. 320/1401 L.O.S. 321/0001 COMMANDS 281 RANGING -NIL

DEVIATIONS OR ANOMALIES

BDA PREDIC 19.1 ACTUAL 18.2 SCIENCE DATA AT 8.1 KBPS  
1559-2314Z 2-WAY, CMD TIMES: 1602-2227Z  
1510-1540Z, 360/75 DOWN FOR SYSTEM RELOAD OF NEW VERSION  
(11.4)-NO DR  
1850-1859Z, 360/75 DOWN-DR2461  
1923Z SDA 1 BAD DATA CONDITIONER-SWITCHED TO BACK-UP ON  
B COMPUTER. DR1560

PASS 0171 NOV 16,1971 NOV 16,1971 DAY 320 320  
-----  
DSS 51 A.O.S. 320/1457 L.O.S. 320/2100 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

\*DO.BIAS 3W.-1.00  
DR T-35 ENGR SNR -1.7DB BELOW PRDX  
1500Z DIS DOWN-RFO UNKNOWN-1WAY TRK 1457-2100Z  
1510-1540Z 360/75 DOWN-SYSTEM RELOAD OF NEW VERSION 11.4-NO  
DR-SCHEDULED  
1812Z-DIS ON LINE-RFO-AFTER INSTALLATION OF MODIFICATION,  
CABLE W144, AS SPECIFIED IN ECO 71084, STATION WAS UNABLE  
TO RECORD ON MAG TAPE DRIVE. SUBJECT MODIFICATION REMOVED,  
CHECKED, AND RE-INSTALLED TO SPECIFICATIONS OF ECO 71084.  
PROBLEM CLEARED AFTER 2ND INSALLATION. DR1559 REFERS  
1850-1859Z, 360/75 DOWN-PRO DSK PACKS SAT-SWAPPED TO  
BACK-UP-DR2461

PASS 0171 NOV 16,1971 NOV 17,1971 DAY 320 321  
-----  
DSS 12 A.O.S. 320/2109 L.O.S. 321/0753 COMMANDS 32 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2314-0308Z TO 0356-0710Z CMD TIMES: 0034-0530Z  
2227Z-DIS RELOADED-STA. UNABLE TO ACCESS CRT-NO DR  
0350Z-DIS PROGRAM HUNG, DIS REINITIALIZED-NO DR  
0500-0509Z, 360 DOWN, 1052 CONSOLE LOCKED OUT, DR2455  
SCIENCE BIT RATE 8.1 KBPS:STANDARD PLAYBACK PROCEDURE

PASS 0171 NOV 17,1971 NOV 17,1971 DAY 321 321  
-----  
DSS 41 A.O.S. 321/0648 L.O.S. 321/1608 COMMANDS 21 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-0700-1508Z  
CMDS 0706-1449Z  
1053-1059Z-360/75 DOWN-DR2467 REFERS  
2-WAY TK: 1744-2120Z CMDS XMTD 1820-2006Z  
1625-1630Z 360/75 DOWN-COLD IPL SKED SOFTWARE CHANGE VER  
11.4-NO DR  
2329-2342Z 360/75 DOWN CANCELLED R/T JOB WITH DUMP-WARM RE-  
START AND IPL DR2464  
8.1 KBPS AND 16.2 KBPS

PASS 0172 NOV 17,1971 NOV 18,1971 DAY 321 322  
-----  
DSS 12 A.O.S. 321/2104 L.O.S. 322/0757 COMMANDS 147 RANGING -NIL

DEVIATIONS OR ANOMALIES

2122Z-TCP-A RELOADED-COULD NOT CONTROL MAG TAPES  
2329-2342Z, 360/75 DOWN, CANX R/T JOB WITH DUMP-WARM IPL  
DR24  
0111-0127Z, 360 DOWN, COLD IPL, DR2465  
0309-0334Z, 360 DOWN, RESTORE DISC PACKS, SYSTEM UPDATE;  
NO DR  
SCIENCE BIT RATE 8.1 KBPS:STANDARD PLAYBACK PROCEDURE  
\* LAST READING UNAVAILABLE, DUE TO 360 OUTAGE AT LOS  
2-WAY TRK 2133-0305Z AND 0350-0757Z CMD TIMES: 2135-0243 AND  
0645-0730Z

PASS 0172 NOV 18,1971 NOV 18,1971 DAY 322 322  
-----  
DSS 41 A.O.S. 322/0648 L.O.S. 322/1606 COMMANDS 112 RANGING -NIL

DEVIATIONS OR ANOMALIES

0752-0800Z 360/75 DOWN-RTMFP PROBS. RESTART DR2466

PASS 0172 NOV 18,1971 NOV 19,1971 DAY 322 323  
-----  
DSS 14 A.O.S. 322/2137 L.O.S. 323/0737 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

2329-2342, 360 DOWN, CANX R/T JOB WITH DUMP, WARM IPL, DR2464  
0111-0127, 360 DOWN, IPL "COLD" DR2465  
DIS RELOADED DURING OCCULTATION (0305Z)  
0309-0334Z, 360 DOWN, RESTORE DISK PACKS, SYSTEM UPDATE;  
NO DR  
0752-0800Z, 360 DOWN-RTMFP PROBLEMS-RESTART, DR2466  
ENGINEERING DATA RECEIVED FROM STATION 12: STANDARD PLAYBACK  
BDA PREDIC 7.3 ACTUAL 7.3 SCIENCE BIT RATE AT 8.1 KBPS

PASS 0173 NOV 18,1971 NOV 19,1971 DAY 322 323  
-----  
DSS 62 A.O.S. 322/1355 L.O.S. 323/0001 COMMANDS 15 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1555-2120Z CMDS XMTD 1558-1820Z  
1840-1856Z 360/75 DOWN-COLD START DR2469

PASS 0173 NOV 18,1971 NOV 19,1971 DAY 322 323  
-----  
DSS 12 A.O.S. 322/2136 L.O.S. 323/0732 COMMANDS 68 RANGING -NIL

DEVIATIONS OR ANOMALIES

0402-0415Z, 360/75 DOWN, RE-IPL, DUE TO 2 STREAMS 1 SEC TDH  
DATA BACKLOG SYSTEM-DR2466  
0501-0506Z, 360/75 DOWN, TAKEN DOWN-RESTART, DUE TO BACKLOG  
JOB NOT FUNCTIONING PROPERLY, NO DR  
2-WAY TRK: 2134Z TO 0302Z AND 0351-0730Z  
CMD TIMES: 2153-0225Z + 0358-0719Z  
CMD TIMES: 2153-0225Z AND 0358-0719Z

PASS 0173 NOV 18,1971 NOV 19,1971 DAY 322 323  
-----  
DSS 14 A.O.S. 322/2136 L.O.S. 323/0732 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

0402-0415Z, 360 DOWN, RE-IPL, DUE TO 2 STREAMS 1 SEC TDH  
DATA BACKLOG SYSTEM, DR2466  
0501-0506, 360 DOWN, TAKEN DOWN-RESTART, DUE BACKGROUND JOB  
NOT FUNCTIONING PROPERLY-NO DR

PASS 0173 NOV 19,1971 NOV 19,1971 DAY 323 323  
-----  
DSS 41 A.O.S. 323/0643 L.O.S. 323/1604 COMMANDS 32 RANGING NIL

DEVIATIONS OR ANOMALIES

0744Z-0845Z,0918Z-0958Z,1027Z-1110Z,1134Z-1227Z,1240Z-1503Z 2-  
WAY 1232Z-1248Z 360/75 DOWN COLD IPL DR-2472.  
1259Z-1307Z TCP DOWN,TAKEN DOWN FOR RELOADNO DR.

PASS 0174 NOV 19,1971 NOV 19,1971 DAY 323 323  
-----  
DSS 62 A.O.S. 323/1353 L.O.S. 323/2400 COMMANDS 59 RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-A  
ACTUAL-18.3  
PREDIC-18.9  
DIFFER -0.5  
2-WAY TRK: 1549-2120Z CMDS XMTD 1556-1857Z

PASS 0174 NOV 19,1971 NOV 20,1971 DAY 323 324  
-----  
DSS 12 A.O.S. 323/2059 L.O.S. 324/0750 COMMANDS 3 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2120-0700Z CMDS XMTD 2135-0655Z  
2258-2306Z-3100 DOWN-DTV'S STOPPED UPDATING-DR2476  
TCP-A RELOADED DURING OCCULTATION

PASS 0174 NOV 19,1971 NOV 20,1971 DAY 323 324

DSS 14 A.O.S. 323/2132 L.O.S. 324/0730 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

2258-2306Z 3100 DOWN-DTV'S STOPPED UPDATING-DR2476  
3-WAY TRK ONLY

PASS 0174 NOV 20,1971 NOV 20,1971 DAY 324 324

DSS 41 A.O.S. 324/0636 L.O.S. 324/1603 COMMANDS 3 RANGING -NIL

DEVIATIONS OR ANOMALIES

0714-1014Z, 1036Z-1125Z, 1139-1146Z, 1344-1409Z, 1410-1500Z  
2-WAY TRK

PASS 0175 NOV 20,1971 NOV 20,1971 DAY 324 324

DSS 62 A.O.S. 324/1350 L.O.S. 324/2158 COMMANDS 149 RANGING -NIL

DEVIATIONS OR ANOMALIES

1732-2026Z 2-WAY

PASS 0175 NOV 20,1971 NOV 21,1971 DAY 324 325

DSS 12 A.O.S. 324/2058 L.O.S. 325/0754 COMMANDS 5 RANGING MU

DEVIATIONS OR ANOMALIES

0644-0657Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL DR2479  
2-WAY TRK-2120-0700Z-CMDS XMTD-2140-0655Z

PASS 0175 NOV 20,1971 NOV 21,1971 DAY 324 325

DSS 14 A.O.S. 324/2140 L.O.S. 325/0728 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

0644-0657Z 360/75 DOWN, LOCKED OUT OF SYSTEM-RE-IPL DR2479  
3-WAY TRK-NO CMDS

PASS 0175 NOV 21,1971 NOV 21,1971 DAY 325 325

DSS 41 A.O.S. 325/0621 L.O.S. 325/1600 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-0714-1454Z 7 CMDS XMTD 0751-1454Z  
0644-0657Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE-IPL-DR2479  
0810-0820Z-360/75 DOWN-STRING SWAP-B TO A-NO DR  
0925Z-DIS RELOADED  
0929-0933Z-360/75 DOWN-SWAP MSD PACKS FROM B STRING-RESTART-  
DR2479

PASS 0176 NOV 21,1971 NOV 22,1971 DAY 325 326  
-----  
DSS 62 A.O.S. 325/1348 L.O.S. 326/0001 COMMANDS 624 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR  
ACTUAL-17.7  
PREDIC-18.4  
DIFFER -0.7  
1942-1954Z 3100 DOWN-360/75 TAKEN DOWN TO RE ESTABLISH  
3100/360 INTERFACE-IPL DR2393/2435  
2145-2155Z DTV'S HUNG UP, DUE TO 3100 PROBLEMS DR2393/2435  
REFER.  
2233-2259Z 360/75A TAKEN DOWN FOR UNSKED MAINT. DUE TO MEMORY  
FAILURES. SWAPPED TO B  
2028Z LOST HSOL FRCM GODDARD TO DSS 62 DR4037

PASS 0176 NOV 21,1971 NOV 22,1971 DAY 325 326  
-----  
DSS 12 A.O.S. 325/2056 L.O.S. 326/0748 COMMANDS 14 RANGING -MU

DEVIATIONS OR ANOMALIES

2145-2155Z DTV'S HUNG DUE TO 3100 PROBLEM DR2393/2435 REFERS  
2233-2259Z 360/75 TAKEN DOWN FOR UNSKED MAINT. DUE TO MEMORY  
FAILURES SWAPPED TO "B" SYSTEM DR2484  
2-WAY TRK-2330-0740Z CMDS 2333-0735Z

PASS 0176 NOV 21,1971 NOV 22,1971 DAY 325 326  
-----  
DSS 14 A.O.S. 325/2127 L.O.S. 326/0732 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC TCP-B SNR  
ACTUAL- 141.6 5.9  
PREDIC- 140.9 6.4  
DIFFER -0.7 -0.5  
2127Z AOS-MON DATA HAD S/C I.D. 85 VICE 75 RELOAD REQ.  
COMP 2140Z NO DR  
2233Z 360/75 TAKEN DOWN FOR UNSKED MAINT, DUE TO MEMORY FAIL-  
URES SWAPPED TO 22+03Z "B" SYSTEM DR2484  
3-WAY TRK ONLY NO CMDS

PASS 0176 NOV 22,1971 NOV 22,1971 DAY 326 326  
-----  
DSS 41 A.O.S. 326/0648 L.O.S. 326/1558 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

CMD'S ENTERED IN MANUAL MODE DUE TO OUTAGE DR2488  
1214-1405Z 360/75 DOWN-2260'S LOCKED OUT OF SYSTEM-WARM IPL  
REQ-DR2487  
1350-1405Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL REQ-DR2488  
1437-1453Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL REQ-DR2489  
1502-1553Z DTV'S HALTED REF DR2490  
1542-1553Z 360/75 DOWN-ERROR ON MDR ABENDED DR2490  
0834-1435Z 2-WAY

PASS 0176 NOV 22,1971 NOV 22,1971 DAY 326 326  
-----  
DSS 42 A.O.S. 326/0758 L.O.S. 326/1446 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

DR T-37 ON D/L RESD -2.5DB PRDX

PASS 0177 NOV 22,1971 NOV 22,1971 DAY 326 326  
-----  
DSS 62 A.O.S. 326/1345 L.O.S. 326/2400 COMMANDS 4 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR  
ACTUAL- 17.9  
PREDIC- 18.3  
DIFFER -0.4  
2-WAY TRK: 1439-2110 CMDS XMTD  
1350 -1405Z 360/75 DOWN-LOCKED-OUT OF SYSTEM-RE-IPL DR2488  
1437-1453Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE-IPL DR2489  
1502-1553Z DTV'S NOT UPDATING-REF DR2490  
1542-1553Z 360/75 DOWN-ERROR ON ABEND (MDR) DR2490  
2138-2150Z 360/75 TAKEN DOWN TO ATTEMPT RESOLUTION OF PRDX  
DR2496

PASS 0177 NOV 22,1971 NOV 23,1971 DAY 326 327  
-----  
DSS 12 A.O.S. 326/2053 L.O.S. 327/0747 COMMANDS 14 RANGING MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2110-0740Z CMDS XMTD AT 2120-0735Z  
2138-2150Z 360/75 DOWN (TAKEN DOWN) IN ATTEMPT TO RESOLVE  
PRDX PROBLEM-DR2496

PASS 0177 NOV 22,1971 NOV 23,1971 DAY 326 327  
-----  
DSS 14 A.O.S. 326/2125 L.O.S. 327/0730 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC RANGING ON TCP-B SNR  
ACTUAL-143.1 5.7  
PREDIC-142.0 6.0  
DIFFER -1.1 -0.3  
2154Z STATION SWAPPED FROM TCP "B" TO "A" DUE TO VERY HIGH  
ERROR COUNT  
2215Z SWAPPED BACK TO TCP "B"  
0044-0049Z DIS DOWN TO INITIALIZE SUMMARY BLOCK PER TWX  
0437-0454Z DIS DOWN DUE TO HANG-UP-RELOAD-DR1569  
2138-2150Z 360/75 TAKEN DOWN TO ATTEMPT RESOLUTION OF PRDX  
DR2496

PASS 0177 NOV 23,1971 NOV 23,1971 DAY 327 327  
-----  
DSS 41 A.O.S. 327/0647 L.O.S. 327/1555 COMMANDS 10 RANGING -NIL

DEVIATIONS OR ANOMALIES

\* STA HAD SDA SYMR SET FOR 33 1/3 WHILE SPC WAS 8 1/3  
CHANGED 0805, B/R CHG 33 1/3 0834  
2-WAY TRK-0754-1446Z CMDS-11:57-1408

0647-ADS-S/C ID OF 85 VICE 75-STATION RE-LOADING DIS-NO DR  
0656Z DIS RELOAD COMPLETE  
1500-1508Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL-DR2506

PASS 0178 NOV 23,1971 NOV 23,1971 DAY 327 327  
-----  
DSS 62 A.O.S. 327/1347 L.O.S. 327/2400 COMMANDS 3 RANGING -NIL

DEVIATIONS OR ANOMALIES

1500-1508Z-360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL-DR2506  
2034-2046Z-360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND  
RESTART REQ-DR2508

PASS 0178 NOV 23,1971 NOV 23,1971 DAY 327 327  
-----  
DSS 51 A.O.S. 327/1553 L.O.S. 327/2100 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

2034-2046Z-360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND  
RESTART REQ DR2508

PASS 0178 NOV 23,1971 NOV 24,1971 DAY 327 328  
-----  
DSS 12 A.O.S. 327/2052 L.O.S. 328/0746 COMMANDS 16 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK:2103-0740Z CMDS XMTD 2117-0735Z  
2034-2046Z 360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND RE-  
START REQ-DR2508  
2218-2229Z 360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND RE-  
START REQ-DR25  
2300-2311Z 360/75 TAKEN DOWN FOR SWAP FROM "B" TO "A"--NO DR  
0104-0110Z 360/75 DOWN-PRODISK FULL 100%-IPL REQ-DR2508  
0627-0640Z 360/75 DOWN-CANX REALTIME JOB-LOCKED OUT OF  
SYSTEM-RE IPL-DR2512  
PROCEDURAL ERROR DURING MANUAL CMD SEQUENCE-DR1570

PASS 0178 NOV 23,1971 NOV 24,1971 DAY 327 328  
-----  
DSS 14 A.O.S. 327/2122 L.O.S. 328/0729 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

RX 1 AGC	TCP- A SNR
ACTUAL-142.10BM	4.8
PREDIC-141.00BM	5.8
DIFFER -1.1 DB	-1.0
0627-0640Z 360/75 DOWN, CANX REAL-TIME JOB,LOCKED OUT OF SYSTEM-RE IPL DR2512	
ANOMALY TFR ND.--START 034131Z END 042037Z DR1571. REMARKS: ANOMALY IN TCP BETA/W-B CIRCUIT DURING 16.2 KB PLAYBACK	
3-WAY TRK ONLY-NO CMDS	
0104-0110Z 360/75 DOWN FOR IPL, DUE TO PRODISK 100% FULL	

PASS 0178 NOV 24,1971 NOV 24,1971 DAY 328 328  
-----  
DSS 41 A.O.S. 328/0646 L.O.S. 328/1553 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-1020-1441Z. 8 CMDS XMTD 1131-1443Z  
1445-1501Z 360/75 DOWN-CMD MDR/SDR NOT LOGGING-COLD IPL-  
RESTART-DR C-046 REFERS  
1508-1513Z-360/75 DOWN-ABENDS CANX R/T JOB-REF DR C-046

PASS 0179 NOV 24,1971 NOV 24,1971 DAY 328 328  
-----  
DSS 62 A.O.S. 328/1342 L.O.S. 328/2400 COMMANDS 12 RANGING -NIL

DEVIATIONS OR ANOMALIES

RX 1 AGC RX 1 AGC TCP- A-ESNR  
ACTUAL-149.8DBM 150.2DBM 8.5  
PREDIC-149.2DBM 149.2DBM 8.5  
DIFFER -0.6 DB -1.0 DB 0.0  
-WAY TRK: 1528-2105Z CMD TIMES: 1545-2055Z  
426Z DIS RELOADED-NOT UPDATING AND STA. LOG TAPE NOT RECORDING-NO DR  
1445-1501Z-360/75 DOWN-CMD MDR/SDR NOT LOGGING-COLD IPL-  
RESTART-DR C-046 REFERS  
1508-1513Z-360/75 DOWN-ABENDS CANX R/T JOB-REF DR C-046  
1619-1625Z LUST HSLX CARRIER BETWEEN MADRID AND GODDARD  
DR C4072  
2308-2320Z 360 DOWN DUE TO USER OUTPUT PROGRAM PROBS-RESTART  
DR 2518

PASS 0179 NOV 24,1971 NOV 25,1971 DAY 328 329  
-----  
DSS 12 A.O.S. 328/2049 L.O.S. 329/0745 COMMANDS 13 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2105-0735Z CMDS XMTD-2204-0730Z  
2308-2320Z-360/75 DOWN DUE TO USER OUTPUT PROGRAM PROBLEMS  
RESTART-DR 2518

PASS 0179 NOV 24,1971 NOV 25,1971 DAY 328 329  
-----  
DSS 14 A.O.S. 328/2119 L.O.S. 329/0729 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

3-WAY TRK-NO CMDS  
ANOMALY START 052904Z END 053313Z-DR1566-REMARKS: OPEN DR  
WRITTEN OF PASS 173 REFERS, TCP B HALTED FOR UNKNOWN REASON. DATA LOSS WAS COVERED BY ALPHA COMPUTER ODR

PASS 0179 NOV 25,1971 NOV 25,1971 DAY 329 329  
-----  
DSS 41 A.O.S. 329/0645 L.O.S. 329/1550 COMMANDS 8 RANGING -NIL

DEVIATIONS OR ANOMALIES

0750-1429Z 2-WAY 8 CMDS 0746-1437Z  
1042-1055Z 360/75 DOWN-CMD MDR/SDR PROBS-CANX R/T JOB-RESTART  
UNSUCCESSFUL-COLD IPL-DR C-040  
1338-1344Z 360/75 DOWN-NATTRK MFP PROG. PROB.-RESTART-DR0317

REFERS  
1357-1359Z LOST HSDL-NO TRBL FOUND-CLEARED WHILE CHECKING  
1407-1412Z 360/75 DOWN-NATTRK MFP PROG. PROB. IPL REQ.DR0317

PASS 0180 NOV 25,1971 NOV 25,1971 DAY 329 329  
-----  
DSS 62 A.O.S. 329/1339 L.O.S. 329/2400 COMMANDS 609 RANGING NIL

DEVIATIONS OR ANOMALIES

1338-1344Z, 360 DOWN-NATTRK MFP PROGRAM PROB.-RESTART-DR0317  
1407-1412Z, 360 DOWN-SAME AS NATTRK PROB, IPL DR 0317  
1852-1857Z, 3100 DOWN TO PREVENT BACKLOG AND ALLOW A TASK  
COMPLETION-NO DR  
2-WAY TRK: 1523-2100Z CMD TIMES-1545-2045Z

PASS 0180 NOV 25,1971 NOV 26,1971 DAY 329 330  
-----  
DSS 12 A.O.S. 329/2046 L.O.S. 330/0745 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

0050-0108Z 360/75 DOWN-CORE ABENDS-DR2517

PASS 0180 NOV 26,1971 NOV 26,1971 DAY 330 330  
-----  
DSS 41 A.O.S. 330/0645 L.O.S. 330/1548 COMMANDS 97 RANGING NIL

DEVIATIONS OR ANOMALIES

ACTUAL-17.9  
PREDIC-18.8  
DIFFER -0.9  
2-WAY TRK-0735-1432Z CMDS XMTD 0746-1432Z

PASS 0180 NOV 26,1971 NOV 27,1971 DAY 330 331  
-----  
DSS 14 A.O.S. 330/2116 L.O.S. 331/0727 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0050-0108Z 360/75 DOWN-CORE ABENDS, DR2519

PASS 0181 NOV 26,1971 NOV 26,1971 DAY 330 330  
-----  
DSS 62 A.O.S. 330/1335 L.O.S. 330/2359 COMMANDS 287 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP- AE SNR TCP- AS SNR  
ACTUAL-15.1 -16.0  
PREDIC-15.5 -16.5  
DIFFER -0.4 - 0.5  
2-WAY TRK: 1519-2100Z CMD XMIT: 1519-1819Z

PASS 0181 NOV 26,1971 NOV 27,1971 DAY 330 331  
-----  
DSS 14 A.O.S. 330/2113 L.O.S. 331/0726 COMMANDS 4 RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-AE SNR  
ACTUAL-10.2  
PREDIC-10.3  
DIFFER -0.1  
0315-0648Z 2-WAY TRK  
2258-2302Z DIS RELOAD-LOG TAPE NOT WRITING-NO DR  
0143-0159Z 360 DOWN-1052'S LOCKED OUT-IPL REQ-DR2522  
0736-0742Z 360 DOWN-FOR SCHED. SYSTEM SWAP  
013505Z-013552Z ANTENNA DRIVEN OFF POINT-DR01576  
052719Z-052833Z ANTENNA DRIVEN OFF POINT-DR01576

PASS 0181 NOV 27,1971 NOV 27,1971 DAY 331 331  
-----  
DSS 41 A.O.S. 331/0644 L.O.S. 331/1545 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

ACTUAL-18.0 -149.1 -16.4 -17.0  
PREDIC-19.0 -148.0 -17.3 -18.3  
DIFFER -1.0 -1.1 -0.9 -1.3  
2-WAY TRK 0749-1428Z CMDS XMTD 0810-1342Z

PASS 0181 NOV 27,1971 NOV 28,1971 DAY 331 332  
-----  
DSS 12 A.O.S. 331/2045 L.O.S. 332/0744 COMMANDS 7 RANGING -NIL

DEVIATIONS OR ANOMALIES

2115-0231Z 2-WAY 7 CMDS 2109-0233Z  
0143-0159Z 360/75 DOWN-1052'S LOCKED OUT-IPL REQ -DR2522  
0736-0742Z 360/75 DOWN FOR SYSTEM

PASS 0182 NOV 27,1971 NOV 27,1971 DAY 331 331  
-----  
DSS 62 A.O.S. 331/1347 L.O.S. 331/2142 COMMANDS 135 RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-BE SNR TCP-BS SNR  
ACTUAL- 9.5 5.9  
PREDIC- 9.4 6.3  
DIFFE +0.1 +0.1  
2 WAY TRK: 1515-2110Z  
2142Z STATION RELEASED FROM PASS

PASS 0182 NOV 27,1971 NOV 28,1971 DAY 331 332  
-----  
DSS 12 A.O.S. 331/2045 L.O.S. 332/0743 COMMANDS 19 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2110-0228Z AND 0312-0728Z  
0327-0336Z, 360 DOWN, TAKEN DOWN DUE TO CORE FRAGMENTATION,  
DR2489  
0730-0738Z, 360 DOWN, TAKEN DOWN FOR SCHED SYSTEM SWAP  
CMD XMIT:2115-0154Z+0325-0525Z

PASS 0182 NOV 27,1971 NOV 28,1971 DAY 331 332  
-----  
DSS 14 A.O.S. 331/2111 L.O.S. 332/0725 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0327-0336Z 360 DOWN, TAKEN DOWN DUE TO CORE FRAGMENTATION

PASS 0182 NOV 28,1971 NOV 28,1971 DAY 332 332  
-----  
DSS 41 A.O.S. 332/0643 L.O.S. 332/1543 COMMANDS 10 RANGING -NIL

DEVIATIONS OR ANOMALIES

0730-0738Z 360 DOWN FOR SCHED. SYSTEM SWAP  
2-WAY TRK 0429-1425Z

PASS 0183 NOV 28,1971 NOV 28,1971 DAY 332 332  
-----  
DSS 62 A.O.S. 332/1329 L.O.S. 332/2140 COMMANDS 189 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AS SNR	TCP-AS SNR
ACTUAL- 9.4	5.7
PREDIC- 9.2	6.1
DIFFER +0.2	-0.4

PASS 0183 NOV 28,1971 NOV 29,1971 DAY 332 333  
-----  
DSS 12 A.O.S. 332/2042 L.O.S. 333/0742 COMMANDS 17 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY-03:09-0735  
CMD XMIT-21:15 05:30  
0010-0020,3100 DOWN, SYSTEM HUNG, REINITIALIZED-DR2528  
0050-0110Z 360 DOWN, TAKEN DOWN FOR IPL AND "WARM" RESTART  
DR2527  
0651-0700Z 360 DOWN DTV HUNG UP; RE-IPL; DR2529

PASS 0183 NOV 28,1971 NOV 29,1971 DAY 332 333  
-----  
DSS 14 A.O.S. 332/2108 L.O.S. 333/0723 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

ACTUAL-10.0  
PREDIC-10.1  
DIFFER -0.1  
0010-0020Z 3100 DOWN, SYSTEM HUNG, REINITIALIZED;  
0050-0110Z 360 DOWN, TAKEN DOWN FOR IPL AND "WARM" RESTART  
DR2527  
0651-0700Z; 360 DOWN; DTV HUNG UP, RE IPL, DR2529

PASS 0183 NOV 29,1971 NOV 29,1971 DAY 333 333  
-----  
DSS 41 A.O.S. 333/0657 L.O.S. 333/1440 COMMANDS 17 RANGING NIL

## DEVIATIONS OR ANOMALIES

2-WAY TRK 0750-1422Z CMDS XMTD 1104-1335Z

PASS 0183 NOV 29,1971 NOV 29,1971 DAY 333 333  
-----  
DSS 42 A.O.S. 333/0713 L.O.S. 333/1421 COMMANDS 0 RANGING NIL

## DEVIATIONS OR ANOMALIES

DR T-39 ON EXCESSIVE RESID OF 211 CN SS

PASS 0184 NOV 29,1971 NOV 29,1971 DAY 333 333  
-----  
DSS 62 A.O.S. 333/1329 L.O.S. 333/2145 COMMANDS 356 RANGING NIL

## DEVIATIONS OR ANOMALIES

TCP-BE SNR	TCP-BS SNR
ACTUAL- 9.4	5.9
PREDIC- 9.2	5.9
DIFFER +0.2	0.0

1509-2050Z 2-WAY CMDS XMTD 1507-1906Z

PASS 0184 NOV 29,1971 NOV 30,1971 DAY 333 334  
-----  
DSS 12 A.O.S. 333/2040 L.O.S. 334/0738 COMMANDS 15 RANGING MU

## DEVIATIONS OR ANOMALIES

0330-0335Z, 360 DOWN, CORE FRAGMENTATION, IPL REQUIRED-DR2527  
0659-0706Z, 360 DOWN, TAKEN DOWN AT REQUEST OF PROJECT; UN-  
ABLE TO RUN COMGEN, "COLD" IPL REQ. NO DR  
2-WAY-2105-0221, 0306-0735Z  
CMD XMIT-2138-0221Z

PASS 0184 NOV 30,1971 NOV 30,1971 DAY 334 334  
-----  
DSS 41 A.O.S. 334/0630 L.O.S. 334/1538 COMMANDS 11 RANGING NIL

## DEVIATIONS OR ANOMALIES

0659-0706Z, 360 DOWN, UNABLE TO RUN CCMGEN, TAKEN DOWN AT RE-  
QUEST OF PROJECT-COLD IPL REQ-NO DR  
0856-0903, 360 DOWN FOR RELOAD DUE TO 100% SATURATION ON  
MSD PACK  
1109-1117, 360 DOWN TO RESTORE PRO DISK PAKS-WARM IPL  
2-WAY TRK 0750-1419Z-CMD XMTD J610-1332

PASS 0184 NOV 30,1971 DEC 01,1971 DAY 334 335  
-----  
DSS 14 A.O.S. 334/2106 L.O.S. 335/0723 COMMANDS 0 RANGING -NIL

## DEVIATIONS OR ANOMALIES

ACTUAL-12.4	5.7
PREDIC-12.5	6.6

DIFFER +0.1 -0.9  
0330Z-0335Z 360 DOWN DUE TO CORE FRAGMENTATION-IPL REQ

PASS 0185 NOV 30,1971 NOV 30,1971 DAY 334 334

---

DSS 62 A.O.S. 334/1326 L.O.S. 334/2126 COMMANDS 417 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B-E SNR	TCP-B-S SNR
ACTUAL-9.4	5.7
PREDIC-9.3	6.0
DIFFER-0.1	-0.1

PASS 0185 NOV 30,1971 DEC 01,1971 DAY 334 335

---

DSS 12 A.O.S. 334/2038 L.O.S. 335/0737 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

\* PRE-OCCULT:+12/POST OCCULT -1.2  
2-WAY: 2105-0735Z  
CMD XMIT-2110-0730

PASS 0185 NOV 30,1971 DEC 01,1971 DAY 334 335

---

DSS 14 A.O.S. 334/2103 L.O.S. 335/0723 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B SNR	
ACTUAL-12.3	5.5
PREDIC-12.1	6.6
DIFFER +0.2	-1.1

PASS 0185 DEC 01,1971 DEC 01,1971 DAY 335 335

---

DSS 41 A.O.S. 335/0629 L.O.S. 335/1517 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0800Z-1006Z SFOF CP DOWN TWO HRS SCHEDULED MAINT FOR POWER MODIFICATIONS  
1023Z-1037Z 360/75 DOWN DUE TO CP INTERFACE PROBLEM JPL DR 2542  
TRANS CONFIG TABLE FOR CAL 2 TO STA CAUSE CMD LOOP LOCK TO DROP REF DR C-054  
2-WAY TRK 0750-1416Z CMDS TRANXMTD AT 1100Z-1329Z

PASS 0186 DEC 01,1971 DEC 01,1971 DAY 335 335

---

DSS 62 A.O.S. 335/1319 L.O.S. 335/2125 COMMANDS 351 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-A-2 SNR	
ACTUAL- 9.2	5.6
PREDIC- 9.1	5.9
DIFFER +0.1	

-WAY TRK-1442-2045Z CMDS XMTD-1447-2040Z  
OH MISLABLED 3-WAY VICE 1-WAY-DR-0323

PASS 0186 DEC 01,1971 DEC 02,1971 DAY 335 336  
-----  
DSS 12 A.O.S. 335/2035 L.O.S. 336/0740 COMMANDS 16 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK-2045-0735Z CMDS XMTD-2054-0730Z  
DATA MISSING (TDH) 0110-0306Z-DUE TO TDH FAILURE AT STATION  
0128:25Z-0128:35Z UNEXPLAINED CMD ALARM 2000-0000-TO BE INVESTIGATED DR C-056

PASS 0186 DEC 01,1971 DEC 02,1971 DAY 335 336  
-----  
DSS 14 A.O.S. 335/2100 L.O.S. 336/0722 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-BS SNR	TCP-BS SNR
ACTUAL-12.8	-9.5
PREDIC-12.7	-9.4
DIFFER +0.1	+0.1

3-WAY TRK ONLY-NO CMDS  
2248-2329Z-360/75 TAKEN DOWN FOR VERSION SWAP 12.5-NO DR  
TCP-B RELOADED DURING OCCULTATION-NO DR  
0140-0219Z TCP BETA "W" BUFFER HUNG-UP UNABLE TO GET CONTROL  
OF TYPEWRITER-NO DATA LOST-DR N/A-TFR N/A

PASS 0186 DEC 02,1971 DEC 02,1971 DAY 336 336  
-----  
DSS 41 A.O.S. 336/0636 L.O.S. 336/1518 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR
ACTUAL-17.3
PREDIC-18.2
DIFFER -0.9

0829-0834Z 360/75 DOWN-RESTART R/T JOB STEP-DR2552  
1512-1518Z 360/75 DOWN-RESTART R/T JOB STEP-DR2555  
2-WAY TRK-0750-0805Z, 0836-1414Z-CMD XMTD 0859-1414Z

PASS 0187 DEC 02,1971 DEC 02,1971 DAY 336 336  
-----  
DSS 62 A.O.S. 336/1319 L.O.S. 336/2145 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

*	TCP-AE SNR	TCP-AE SNR
ACTUAL-15.6	16.2	
PREDIC-16.1	17.1	
DIFFER -0.5	-0.9	

CMD ABORT DUE DISABLE MSG-2 WAY TRK-1439-2045Z-CMDS XMTD  
1444-2040Z

PASS 0187 DEC 02,1971 DEC 03,1971 DAY 336 337  
-----  
DSS 12 A.O.S. 336/2035 L.O.S. 337/0740 COMMANDS 24 RANGING -MU

DEVIATIONS OR ANOMALIES

2 WAY TRK-2045Z-CMDS XMTD-2056Z  
2041-2046Z-3100 DOWN-RFO UNKNOWN-NO DR  
2129-2135Z 360/75 DOWN-TAPE READ/WRITE PROBLEMS-DR2561

2251-2300Z-DIS RELOADED-C/U "CMD ATTEMPT" COUNT IN ERROR (0 VS5) IN FZ.-NU DR  
2340Z-CMD XMTD-DIV FORMAT 2-"CMD ATTEMPTS" COUNT UPDATING OK NOW.  
0111-0126Z-360 DOWN-TAPE READ/WRITE PROBLEMS-IPL REQ-DR2561  
0145Z-CMDING PROBLEM TCP-A-BLOCK REJECTED DUE TO MAN/HSD  
DSBL ALARMS-TCP-A RELOADED-DR C-058 REFERS

PASS 0187 DEC 02,1971 DEC 03,1971 DAY 336 337  
-----  
DSS 14 A.O.S. 336/2059 L.O.S. 337/0721 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B SNR TCP-B SNR  
ACTUAL-12.7 9.3  
PREDIC-12.8 9.3  
DIFFER -0.1 -0.0  
3-WAY TRK ONLY-NO CMDS-SCIENCE DATA ON TCP-A ENG. DATA ON TCP-B  
2129-2135Z 360 DOWN-TAPE READ/WRITE PROBLEMS-DR2561  
0111-0126Z 360 DOWN-TAPE READ/WRITE PROBLEMS-IPL REQ-DR2561  
0413-0419Z 360 DOWN-TAPE READ/WRITE PROBLEMS-LOSS OF OUTPUT-IPL REQ-DR2562

PASS 0187 DEC 03,1971 DEC 03,1971 DAY 337 337  
-----  
DSS 41 A.O.S. 337/0716 L.O.S. 337/1529 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0745Z-1412Z CMD TIME:0821Z TO 1340Z  
0835Z-0855Z 360/75 DOWN 2260 LOCKED OUT DR-2563  
1148Z-1157Z 360/75 DOWN RESTARTING R/T JOB STEP REF DR-2563  
1207Z-1235Z 360/75 DOWN SYSTEM SWAP FROM A TO B  
BAD DATA SET DELAYED COMMAND DATA TRANSFER TEST REF. DR-4133

PASS 0188 NOV 23,1971 DEC 04,1971 DAY 327 338  
-----  
DSS 12 A.O.S. 327/2030 L.O.S. 338/0738 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-CMDS XMTD  
2103-2118-360/75DOWN-SOE RUN CAUSED-LOCK OUT-DR2568  
2246-2302Z 360/75 DOWN-COLD IPL AND WARM RESTART DR2569  
0035-0054Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2569  
0306-0323Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2571  
0323-0359Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL-SWAPPED  
SWAPPED STRINGS "B" TO "A"-DR2571  
0736-LOS-360/75 DOWN-STRING SWAP "A" TO "B"-SCHEDULED-NO DR

PASS 0188 DEC 03,1971 DEC 03,1971 DAY 337 337  
-----  
DSS 62 A.O.S. 337/1315 L.O.S. 337/2130 COMMANDS 330 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRACK 1437Z-2037Z CMD XMTD AT 1442Z-2035Z  
2103Z-2118Z 360/75 DOWN-SOE RUN CAUSED LOCK OUT DR-2568  
POST TRACK REPORT 1517Z-1526Z TCP-A PROGRAM HUNG-UP SWITCHED TO TCP-B FOR COMMANDING DR-1585

PASS 0188 DEC 03,1971 DEC 04,1971 DAY 337 338  
-----  
DSS 14 A.O.S. 337/2056 L.O.S. 338/0720 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B5 SNR TCP-B SNR  
ACTUAL-12.9 9.4  
PREDIC-12.7 9.3  
DIFFER +0.2 +0.1  
2103-2118Z-360/75 DOWN-SOE RUN CAUSED LOCK-OUT-DR2568  
2205-2210Z DIS DOWN-RELOADED-NO DR  
2246-2302Z 360 DOWN-COLD IPL AND WARM RESTART-DR2569  
0035-0054Z 360 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2569  
0306-0323Z 360 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2571  
0323-0359Z 360 DOWN-LOCKED OUT OF SYSTEM-RE IPL-STRING SWAP  
"B" TO "A" DR2571  
3 WAY TRK-NO CMDS

PASS 0188 DEC 04,1971 DEC 04,1971 DAY 338 338  
-----  
DSS 41 A.O.S. 338/0618 L.O.S. 338/1527 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

0736-0745Z-360 DOWN-STRING SWAP "A" TO "B"-SCHEDULED-NO DR  
0808-0815Z-360 DOWN-COLD IPL AND WARM RESTART-SYS NOT RE-  
SPONDING TO REQUIRED DR2561  
0948-1000Z 360 DOWN-COLD IPL AND WARM RESTART-REF DR2561  
1002-1109Z 360 DOWN-2260'S LOCKED OUT, SWAP RTOSA PACKS;  
COLD IPL/START DR2561-MANUAL COMMANDING DUE TO 360 DOWN  
CMD XMIT: 1025-1322Z/2 WAY TRK: 0746-1410Z

PASS 0189 DEC 04,1971 DEC 04,1971 DAY 338 338  
-----  
DSS 62 A.O.S. 338/1313 L.O.S. 338/2130 COMMANDS 23 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1454-2040Z;CMD XMIT: 1530-1731Z

PASS 0189 DEC 04,1971 DEC 05,1971 DAY 338 339  
-----  
DSS 12 A.O.S. 338/2026 L.O.S. 339/0738 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

UPLINK  
2-WAY TRK-2040-0730Z CMDS XMTD 2059-0725Z  
0028-0038Z 360/75 DOWN CP/360 INTERFACE PROBLEM-IPL-RESTART-  
DR2529

PASS 0189 DEC 04,1971 DEC 05,1971 DAY 338 339  
-----  
DSS 14 A.O.S. 338/2053 L.O.S. 339/0719 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCB- -E SNR TCP-B-S SNR  
ACTUAL-12.7 9.3  
PREDIC-12.6 9.1  
DIFFER +0.1 +0.2  
3-WAY TRK ONLY-NO CMDS  
0028-0038Z-360 DOWN-CP/360 INTERFACE PROB. IPL-RESTART-DR2529

PASS 0189 DEC 05,1971 DEC 05,1971 DAY 339 339  
-----  
DSS 41 A.O.S. 339/0619 L.O.S. 339/1525 COMMANDS 23 RANGING NIL

DEVIATIONS OR ANOMALIES

0750-0803Z 360/75 DOWN-SCHEDULED STRING SWAP "B" TO "A"  
NO DR  
0906-0931Z 360/75 DOWN-LOCKED OUT OF SYSTEM, IPL REQ DR2574  
2-WAY TRK: 0746-1408Z CMDS XMTD 0940-1319Z

PASS 0190 DEC 05,1971 DEC 05,1971 DAY 339 339  
-----  
DSS 62 A.O.S. 339/1311 L.O.S. 339/2130 COMMANDS 191 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1451-2040Z CMD XMIT:1451-1716  
1739-1746Z 360 DOWN, TAKEN DOWN FOR RESTART, UNABLE TO RECALL  
MDR ENG. DATA-DR2576

PASS 0190 DEC 05,1971 DEC 06,1971 DAY 339 340  
-----  
DSS 12 A.O.S. 339/2023 L.O.S. 340/0730 COMMANDS 15 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-2056-0730Z CMDS XMTD-2110-0250Z  
2315-2321Z 360/75 DOWN-DR2578 (ERROR IN MSD PACK-RESTART)  
0400Z-DIS LOG TAPE NOT ENABLED-RE-ENABLED BY STATION-NO DR  
0450-0503Z 360/75 DOWN-UNABLE TO ALLOCATE TAPES-RESTART  
DR2580

PASS 0190 DEC 05,1971 DEC 06,1971 DAY 339 340  
-----  
DSS 14 A.O.S. 339/2050 L.O.S. 340/0717 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-BS SNR TCP-BS SNR  
ACTUAL-13.0 9.2  
PREDIC-12.6 9.2  
DIFFER +0.4 0.0  
2315-2321Z-360/75 DOWN-ERROR ON MSD PACK-RESTART-DR2578  
0450-0503Z-360/75 DOWN-UNABLE TO ALLOCATE TAPES-RESTART  
DR2580 -3 WAY TRK ONLY-NO CMDS

PASS 0190 DEC 06,1971 DEC 06,1971 DAY 340 340  
-----  
DSS 41 A.O.S. 340/0638 L.O.S. 340/1425 COMMANDS 12 RANGING -NIL

DEVIATIONS OR ANOMALIES

0828-0834Z-360/75 TAKEN DOWN FOR RESTART, DUE TO P/RESID  
PROBS. DR2583  
2-WAY TRK 0746-1406Z CMDS XMTD 0823-1340Z

PASS 0190 DEC 06,1971 DEC 06,1971 DAY 340 340  
-----  
DSS 42 A.O.S. 340/0810 L.O.S. 340/1400 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

NO D/L OR SNR RECEIVED FROM STA-DATA NOT BEING PROCESSED  
50 BIT H/S DATA BLOCK WAS FULL DATA THROUGHOUT PHASE L/S  
GOOD, PROBLEM UNSOLVED AT EOT. DR1591

PASS 0191 DEC 06,1971 DEC 06,1971 DAY 340 340  
-----  
DSS 62 A.O.S. 340/1437 L.O.S. 340/2140 COMMANDS 239 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 1449-2135Z CMD XMIT: 1448-2125Z  
1930-1955Z, 3100 DOWN, TAKEN DOWN TO CORRECT DTV PROB.  
DR2588  
1936-1955Z, 360 DOWN, 3100 OUTAGE CAUSED PROBLEM, LOCKED OUT  
BOTH STRINGS, DR2588

PASS 0191 DEC 06,1971 DEC 07,1971 DAY 340 341  
-----  
DSS 14 A.O.S. 340/2058 L.O.S. 341/0718 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AE SNR TCP BS SNR  
ACTUAL-5.1 9.2  
PREDIC-5.6 9.0  
DIFFER-0.5 +0.2

3-WAY TRK-NO CMDS  
2320-0022Z 360/75 DOWN-R/T JOB STEP-COLD IPL-MISSION RESTART  
SWAP TO BACKUP DISC PACKS-DR2590  
0010-0016Z-TCP-B HALTED-RELOAD REQ-DR1592  
0136-0146Z-360/75 DOWN-COMPUTER TIME 3 MINS SLOW-PROCESSING  
PROBLEMS-RE IPL-RESTART-DR2592

PASS 0191 DEC 06,1971 DEC 07,1971 DAY 340 341  
-----  
DSS 12 A.O.S. 340/2125 L.O.S. 341/0730 COMMANDS 11 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2151-0207Z CMDS XMTD 2205-0245Z  
2320-0022Z 360/75 DOWN R/T JOB STEP-COLD IPL-MISSION RESTART  
SWAP TO BACKUP DISC PACKS-DR2590  
0136-0146Z 360/75 DOWN-COMPUTER TIME 3 MINS SLOW-PROCESSING  
PROBLEMS-RE IPL-RESTART-DR2592  
NOTE: DSS 12 MANUAL CMPING DUE TO 360/75 PROB. REF DR2590

PASS 0191 DEC 07,1971 DEC 07,1971 DAY 341 341  
-----  
DSS 41 A.O.S. 341/0653 L.O.S. 341/1443 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0707-0712-TCP-A CMD VERIFICATION PROBLEMS-RELOAD-HSDL SWAP  
DR4160  
0952-0953Z 360/75 DOWN FOR SKED STRING SWAP, SWAP TO "B"  
1008-1030Z 360/75 DOWN DUE TLM PROCESS BACKLOG, R-DUMP  
REQ & RESTART DR2593  
1033-1050Z 360/75 DOWN; COLD IPL/START REQ REF DR2593

PASS 0192 DEC 07,1971 DEC 07,1971 DAY 341 341  
-----  
DSS 51 A.O.S. 341/1041 L.O.S. 341/1600 COMMANDS 0 RANGING NIL  
  
DEVIATIONS OR ANOMALIES

PASS 0192 DEC 07,1971 DEC 07,1971 DAY 341 341  
-----  
DSS 62 A.O.S. 341/1312 L.O.S. 341/2145 COMMANDS 303 RANGING NIL  
  
DEVIATIONS OR ANOMALIES

1646-55Z 360 DOWN DR2594; 1920-21Z 360 DOWN DR2596; 2010-30Z  
360 DOWN DR2596  
CMD MESSAGE 161 2 THRU 8 AND 162 1 THRU 7 CONFIRMED BY VOICE  
WHILE 360 DOWN

PASS 0192 DEC 07,1971 DEC 08,1971 DAY 341 342  
-----  
DSS 14 A.O.S. 341/2045 L.O.S. 342/0717 COMMANDS 0 RANGING NIL  
  
DEVIATIONS OR ANOMALIES

TCP BE SNR TCP BS SNR  
ACTUAL-12.8 9.5  
PREDIC-12.9 9.5  
DIFFER -0.1 0.0  
UNABLE TO LOAD AGC CALIB. CURVE-APPARENT HARWARE PROBLEM  
0118Z TCP-B LOST TAPE WRITE CAPABILITY ON LOG TAPE-  
WILL RELOAD DURING OCCULTATION DR1594  
0128-0147Z 360/75 DOWN-LOCKED OUT OF SYSTEM-"R" DUMP-COLD  
IPL-DR2593  
0329Z-DIS RELOADED-NO DR  
3-WAY TRK-NO CMDS  
0255-0304Z 360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL-  
RESTART-DR2593

PASS 0192 DEC 07,1971 DEC 08,1971 DAY 341 342  
-----  
DSS 12 A.O.S. 341/2125 L.O.S. 342/0730 COMMANDS 28 RANGING NIL  
  
DEVIATIONS OR ANOMALIES

2 WAY TRK-2140-0720Z CMDS XMTD-2158-0715Z  
2141Z-TCP-A RELOADED. 0058-0115Z-DIS DOWN FOR RELOAD-NO DR  
0128-0147Z-360/75 DOWN-LOCKED OUT OF SYSTEM-"R" DUMP-COLD  
IPL-DR2593  
0255-0304Z-360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL DR2593

PASS 0192 DEC 08,1971 DEC 08,1971 DAY 342 342  
-----  
DSS 41 A.O.S. 342/0651 L.O.S. 342/1440 COMMANDS 8 RANGING NIL  
  
DEVIATIONS OR ANOMALIES

2 WAY TRK 0736-1401Z

PASS 0193 DEC 08,1971 DEC 08,1971 DAY 342 342  
-----  
DSS 62 A.O.S. 342/1350 L.O.S. 342/2140 COMMANDS 196 RANGING NIL  
  
DEVIATIONS OR ANOMALIES

PASS 0193 DEC 08,1971 DEC 09,1971 DAY 342 343  
-----  
DSS 14 A.O.S. 342/2043 L.O.S. 343/0716 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B5 SNR TCP AE SNR  
ACTUAL- 8.8 5.8  
PREDIC- 8.8 5.9  
DIFFER 0.0 -0.1  
0155Z TCP RELOAD DUE TO LOSS OF ODR-WRT CAPABILITY-DR1592  
J435-J447Z 360/75 DOWN FOR WARM RESTART-DR2606  
3-WAY TRK-NO CMDS

PASS 0193 DEC 08,1971 DEC 09,1971 DAY 342 343  
-----  
DSS 12 A.O.S. 342/2120 L.O.S. 343/0620 COMMANDS 17 RANGING MU

DEVIATIONS OR ANOMALIES

0435-0447Z 360/75 DOWN FOR WARM RESTART-DR2606  
2156-0159Z 2 WAY; 0243-0620Z-CMDS XMTD 2220-0430Z

PASS 0193 DEC 09,1971 DEC 09,1971 DAY 343 343  
-----  
DSS 41 A.O.S. 343/0545 L.O.S. 343/1415 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR  
ACTUAL-17.2  
PREDIC-18.1  
DIFFER -0.9  
MANUAL CMDS DUE 360 TROUBLE DR2608  
1037-1043Z 360/75 TAKEN DOWN DUE TO HANG-UP OF LINE PTR IN  
SYSTEM-WARM IPL DR  
1051-1107Z 360/75 DOWN WARM IPL DID NOT TAKE DR  
2 WAY TRK 0636-1357Z CMDS XMTD 1119-1305Z

PASS 0194 DEC 09,1971 DEC 09,1971 DAY 343 343  
-----  
DSS 62 A.O.S. 343/1426 L.O.S. 343/2140 COMMANDS 317 RANGING NIL

DEVIATIONS OR ANOMALIES

SHIFT CHANGE TO 1614-360 DOWN REF DR2592  
DR C060 GENERATED AGAINST BAD CONFIRMATION MESSAGE RECEIVED  
AT SFOF FROM DSS 62 TCP BETA  
1438-2140Z 2-WAY TRK  
1441-2135Z CMD XMTD

PASS 0194 DEC 09,1971 DEC 10,1971 DAY 343 344  
-----  
DSS 14 A.O.S. 343/2041 L.O.S. 344/0714 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AS SNR TCP AS SNR  
ACTUAL-12.7  
PREDIC-12.5  
DIFFER +0.2  
0119-0130Z 360/75 DOWN 1052-2260Z LOCKED OUT OF SYSTEM DR2571  
0228-0230Z 3100 DOWN CAUSED BY DEVELOPMENT TEST

PASS 0194 DEC 09,1971 DEC 10,1971 DAY 343 344  
-----  
DSS 12 A.O.S. 343/2120 L.O.S. 344/0500 COMMANDS 18 RANGING MU

DEVIATIONS OR ANOMALIES

0119-0130Z 360/75 DOWN 1052+2260Z LOCKED OUT OF SYSTEM DR2571  
0228-0230Z 3100 DOWN CAUSED BY DEVELOPMENT TEST

PASS 0194 DEC 10,1971 DEC 10,1971 DAY 344 344  
-----  
DSS 41 A.O.S. 344/0425 L.O.S. 344/1356 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0517Z-1354Z CMDS XMTD AT 01006Z-1301Z

PASS J195 DEC 10,1971 DEC 10,1971 DAY 344 344  
-----  
DSS 62 A.O.S. 344/1422 L.O.S. 344/2135 COMMANDS 184 RANGING NIL

DEVIATIONS OR ANOMALIES

1744-1809Z-360/75 DOWN-OUTPUT STOPPED-LOCKED OUT OF SYSTEM  
RE IPL-DR2624  
2-WAY TRK: 1434-2135Z-CMDS XMTD 1418-2130Z  
1530-17:31Z CC+S U54

PASS 0195 DEC 10,1971 DEC 11,1971 DAY 344 345  
-----  
DSS 14 A.O.S. 344/2038 L.O.S. 345/0709 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC	TCP- BE SNR	TCP- BE SNR
ACTUAL-141.8	12.5	9.0
PREDIC-141.8	12.2	8.8
DIFFER 03.0	+0.3	+0.2
TCP-BS SNR	TCP- BS SNR	
ACTUAL-10.6	7.2	
PREDIC-11.4	8.0	
DIFFER -0.8	-0.8	
2-WAY 0411-0509 CMD XMIT 0411		
2047-2104Z-DIS DOWN-RELOAD REQ		
0342-STARTED TO BRING DSS 14 UP-2 WAY DUE TO POWER TROUBLE		
AT DSS 12		

PASS 0195 DEC 10,1971 DEC 11,1971 DAY 344 345  
-----  
DSS 12 A.O.S. 344/2115 L.O.S. 345/0455 COMMANDS 14 RANGING MU

DEVIATIONS OR ANOMALIES

2152-2350Z 2-WAY AND 0131-0232Z 2 WAY 2153-0128Z AND 0216-  
0310Z CMD XMT.  
0127Z POWER GLITCH AT DSS 12-DR1599  
0131Z RIL AFTER POWER GLITCH AT DSS 12 (1) POWER GLITCH  
0132Z XMTR ON AFTER POWER GLITCH AT DSS 12 KICKED OFF XMTR  
0309Z POWER GLITCH AT DSS 12 -ABORTED 1 CMD  
0314Z POWER GLITCH AT DSS 12 (2) UNABLE TO XMIT  
0336Z DSS 12 ON GEN POWER DC-19 THROUGH  
DSS 12 FOR SAME  
REASON REF DR1599

PASS 0195 DEC 11,1971 DEC 11,1971 DAY 345 345

DSS 41 A.O.S. 345/0416 L.O.S. 345/1351 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 0814-1352 CMDS XMTD AT 0730-1352Z  
0802-0831Z-360 DOWN DUE TO 3100-360 INTERFACE PROBS-DR2628

PASS 0196 DEC 11,1971 DEC 11,1971 DAY 345 345

DSS 62 A.O.S. 345/1417 L.O.S. 345/2130 COMMANDS 285 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1430-2130Z CMDS XMTD 1414-2125Z

PASS 0196 DEC 11,1971 DEC 12,1971 DAY 345 346

DSS 14 A.O.S. 345/2035 L.O.S. 346/0710 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC	TCP-B SNR	TCP-AS SNR	TCP BE SNR
ACTUAL-143.0	13.0	5.0	8.2
PREDIC-142.5	12.4	5.5	8.3
DIFFER -0.5	+0.6	-0.5	-0.1

TCP-BE SNR

ACTUAL-5.8

PREDIC-5.9

DIFFER-0.1

0219-0230Z 360/75 DOWN IPL AND RESTART DR2632  
0524-0537Z 360/75 DOWN 2260'S AND 1052'S LOCKED OUT DR2590  
0647-0704Z 360/75 DOWN-DR2632  
0544-0614Z 360/75 SWITCHED TO SYSTEM A

PASS 0196 DEC 11,1971 DEC 12,1971 DAY 345 346

DSS 12 A.O.S. 345/2045 L.O.S. 346/0450 COMMANDS 18 RANGING MU

DEVIATIONS OR ANOMALIES

0219-0230Z 360/75 DOWN IPL AND RESTART DR2632  
2147-0150Z TO 0228-0450Z 2-WAY  
2147-0150Z TO 0211-0445Z CMD XMIT

PASS 0196 DEC 12,1971 DEC 12,1971 DAY 346 346

DSS 41 A.O.S. 346/0411 L.O.S. 346/1346 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

0524-0537Z 360/75 DOWN, 2260'S AND 1052'S LOCKED OUT-DR2590  
0544-0614Z 360/75 DOWN SWITCHED TO SYSTEM A  
0647-0704Z 360/75 DOWN DR2632  
1343-1427Z-LOST ALL CMM. CKTS. REPEATER DOWN-DR4216 (TRACK TERMINATED 1348Z)

PASS 0197 DEC 12,1971 DEC 12,1971 DAY 346 346  
-----  
DSS 62 A.O.S. 346/1412 L.O.S. 346/2130 COMMANDS 193 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1424-2130Z CMDS XMTD-1409-2125Z

PASS 0197 DEC 12,1971 DEC 13,1971 DAY 346 347  
-----  
DSS 14 A.O.S. 346/2023 L.O.S. 347/0700 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC	RX 2 AGC	TCP- BE SNR	TCP- BE SNR
ACTUAL-143.3	143.2	12.6	5.7
PREDIC-142.4	142.3	12.3	5.8
DIFFER -0.9	-0.9	-0.3	-0.1
TCP- BE SNR	TCP- BE SNR		
ACTUAL- 12.3	8.7		
PREDIC- 11.9	8.5		
DIFFER +0.4	+0.2		

0423-0426Z 3100 DOWN-RESTART  
J225-0351Z DOPPLER FIELD WAS ALL ZERO'S, CONTROL 1600

PASS 0197 DEC 12,1971 DEC 13,1971 DAY 346 347  
-----  
DSS 12 A.O.S. 346/2105 L.O.S. 347/0500 COMMANDS 15 RANGING MU

DEVIATIONS OR ANOMALIES

0423-0426Z 3100 HUNG UP-RESTART  
2147-0500Z 2-WAY  
2213-0455Z CMD XMIT

PASS 0197 DEC 13,1971 DEC 13,1971 DAY 347 347  
-----  
DSS 41 A.O.S. 347/0415 L.O.S. 347/1342 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 0517-1344Z CMD XMIT: 0951-1317Z

PASS 0197 DEC 13,1971 DEC 13,1971 DAY 347 347  
-----  
DSS 42 A.O.S. 347/1015 L.O.S. 347/1110 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0198 DEC 13,1971 DEC 13,1971 DAY 347 347  
-----  
DSS 62 A.O.S. 347/1333 L.O.S. 347/2052 COMMANDS 221 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-1420-2052Z CMDS XMTD-1404-2041Z  
1330-1740Z-DIS/TCP INTERFACE-50% LOG ERRORS ON MAG TAPES-  
UNABLE TO ESTABLISH INTERFACES-MAG TAPE CONTROL UNIT ROW  
Z-J6, PLUG IN CARD IK-51 BAD-REPLACED-TFR A61215 TO DR  
T-1702  
1851-1857Z 360/75 DOWN-COLD IPL-COLD RESTART REQ-DR2609

PASS 0198 DEC 13,1971 DEC 14,1971 DAY 347 348

DSS 12 A.O.S. 347/2028 L.O.S. 348/0700 COMMANDS 16 RANGING -MU

DEVIATIONS OR ANOMALIES

RX 1 AGC  
ACTUAL-150.9  
PREDIC-150.5  
DIFFER -0.4  
0034-0037 ROL ANTENNA OFF-POINT T-1704  
0056 RIL SOLID  
DR 0333-INCORRECT DOPPLER GROUND MODE SETTING AFTER RIL  
2-WAY  
2117-0034Z + 0037-0052Z + 0100-0140 + 0217-0700Z 2 WAY  
2141-0041Z + 0047-0655 CMD XMIT

PASS 0198 DEC 13,1971 DEC 14,1971 DAY 347 348

DSS 14 A.O.S. 347/2030 L.O.S. 348/3657 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC TCP-AS SNR TCP- AS SNR  
ACTUAL-143.5 12.5 5.6  
PREDIC-142.4 12.3 5.8  
DIFFER -1.1 +0.2 -0.2  
DR-1705 LOW FILM HEIGHT EOT BRAKES CAME ON ANTENNA  
ACTUAL-12.2 8.7  
PREDIC-11.8 8.4  
DIFFER +0.4 +0.3  
DR1705 LOW FILM RIGHT EOT BRAKES CAME ON MAINTENANCE

PASS 0198 DEC 14,1971 DEC 14,1971 DAY 348 348

DSS 41 A.O.S. 348/0630 L.O.S. 348/1338 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0717-1338Z CMD XMIT:0946-1241Z  
0705-0714Z 360 DOWN FOR IPL, DR2641

PASS 0199 DEC 14,1971 DEC 14,1971 DAY 348 348

DSS 62 A.O.S. 348/1402 L.O.S. 348/2050 COMMANDS 420 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-1414-2050Z - CMDS XMTD-1358-2045Z

PASS 0199 DEC 14,1971 DEC 15,1971 DAY 348 349

DSS 12 A.O.S. 348/2026 L.O.S. 349/0700 COMMANDS 21 RANGING MU

DEVIATIONS OR ANOMALIES

2124-2131Z 360/75 DOWN UNABLE TO PROCESS DSS 12 TDH-FORCE  
DUMP-WARM RESTART-DR2467  
0009-0043Z MONITOR DIV DATA DOWN FOR MAINT. LINE DRIVER  
IN 2240 ACTING UP.  
0131-0136 MONITOR DIV DOWN FOR LINE DRIVE SWAP IN 2240 DR2582  
0330-0407 360/75 DOWN FOR IPL DR2656  
2107-0130 & 0213-0700Z 2-WAY TRK 2126-0050 & 0210-0655  
CMDS XMIT

PASS 0199 DEC 14,1971 DEC 15,1971 DAY 348 349  
-----  
DSS 14 A.O.S. 348/2028 L.O.S. 349/0710 COMMANDS 0 RANGING MU

DEVIATIONS OR ANOMALIES

\* RX 1 AGC TCP- SNR TCP- BE SNR TCP- AS SNR  
ACTUAL-143.1 16.9 4.5 12.6/ 5.5  
PREDIC-142.4 17.4 5.0 12.2/ 5.8  
DIFFER -0.7 -0.5 -0.5 +0.4/-0.3  
2124-2131Z 360/75 DOWN-UNABLE TO PROCESS DSS 12 TDH-FORCE  
DUMP-WARM RESTART-DR2467  
0009-0012Z MONITOR DTV DATA DOWN FOR MAINT. LINE DRIVER IN  
2240 ACTING UP.  
0034-0043Z MONITOR DTV DOWN FOR LINE DRIVER SWAP IN 2240  
DR2582  
0131-0136Z MONITOR DTV DOWN TO RETURN 3100-2240Z TO NORMAL  
REFERENCE-DR2582  
0330-0407Z 360/75 DOWN FOR IPL-DR2651  
DR0334 WRITTEN ON STA 14-FAILED TO RESET DOPPLER SWITCH TO  
1 WAY ON EXIT OF OCCULTATION

PASS 0199 DEC 15,1971 DEC 15,1971 DAY 349 349  
-----  
DSS 41 A.O.S. 349/0630 L.O.S. 349/1335 COMMANDS 19 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0700-1335Z CMDS XMTD-0719-1335Z  
MASER 2 PRIME-MASER 1 MANIFOLD BYPASSED DUE HELIUM LEAKS.  
TFR/UWV/A58712 REFERS.

PASS 0200 DEC 15,1971 DEC 15,1971 DAY 349 349  
-----  
DSS 62 A.O.S. 349/1357 L.O.S. 349/2045 COMMANDS 426 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-1416-2045Z CMDS XMTD-1403-2040Z  
1902-1905Z HSDL DOWN-RETRAIN REQ-NO DR  
DR T-1709 ANTENNA POINTING PROBLEM

PASS 0200 DEC 15,1971 DEC 16,1971 DAY 349 350  
-----  
DSS 12 A.O.S. 349/2023 L.O.S. 350/0440 COMMANDS 16 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK 2102-0440Z CMDS XMTD 2305-0220Z

PASS 0200 DEC 15,1971 DEC 16,1971 DAY 349 350  
-----  
DSS 14 A.O.S. 349/2025 L.O.S. 350/0709 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AS SNR  
ACTUAL-5.4  
PREDIC-5.6  
DIFFER-0.2  
BDA CKT BREAKER TRIPPED 0525Z, LOST SCI DATA TO 0536 DR1710  
020214Z STATION INDICATED 3-WAY DOPPLER MODE WHEN IN FACT  
DSS 12 DID NOT GO 2-WAY UNTIL 02080Z DR0336

PASS 0200 DEC 16,1971 DEC 16,1971 DAY 350 350  
-----  
DSS 41 A.O.S. 350/0410 L.O.S. 350/1331 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0201 DEC 16,1971 DEC 16,1971 DAY 350 350  
-----  
DSS 62 A.O.S. 350/1310 L.O.S. 350/2045 COMMANDS 249 RANGING NIL  
DEVIATIONS OR ANOMALIES

PASS 0201 DEC 16,1971 DEC 17,1971 DAY 350 351  
-----  
DSS 12 A.O.S. 350/2020 L.O.S. 351/0430 COMMANDS 11 RANGING MU  
DEVIATIONS OR ANOMALIES

0036 ANTENNA OFF POINT, IN LOCK 2-W 0109 DR T1712

PASS 0201 DEC 17,1971 DEC 17,1971 DAY 351 351  
-----  
DSS 41 A.O.S. 351/0405 L.O.S. 351/1332 COMMANDS 10 RANGING NIL  
DEVIATIONS OR ANOMALIES

0504-0513Z 360/75 DOWN-LOCKED OUT OF SYSTEM TO IPL REF OPEN DR  
0725-0740Z 360/75 DOWN-LOCKED OUT OF SYSTEM-DR2632  
0805-0808Z 360 DOWN-TAKEN DOWN FOR MODEL SWAP  
0820-0825Z 360 DOWN, BAD LOAD FIRST TIME TAKEN FOR RELOAD  
0447-1328Z 2 WAY-0450-1328 CMD XMIT

PASS 0202 DEC 17,1971 DEC 17,1971 DAY 351 351  
-----  
DSS 62 A.O.S. 351/1349 L.O.S. 351/2040 COMMANDS 145 RANGING NIL  
DEVIATIONS OR ANOMALIES

1659-1705 AND 1707-1722 AND 1801-1803Z 3100 CCWN REF DR2665  
1400-2040Z 2 WAY TRK-1344-2040Z CMD XMIT  
DR T-43 WRITTEN ON SOFTWARE FORMAT 24 DID NOT DISPLAY S/C  
DATA FOR AGC STATUS MONITOR, CMD DET AND FTS MADE-SPE  
HAD A STATIC VALUE OF 71.

PASS 0202 DEC 17,1971 DEC 18,1971 DAY 351 352  
-----  
DSS 12 A.O.S. 351/2018 L.O.S. 352/0610 COMMANDS 15 RANGING MU  
DEVIATIONS OR ANOMALIES

1477  
PTR DR2868  
ACTUAL- 12.5 5.2  
R-DUMP; IPL DR2671  
DIFFER -0.1 -0.9  
2 WAY TRK 2058-0610Z CMDS XMITD 2057-0550Z

PASS 0202 DEC 18,1971 DEC 18,1971 DAY 352 352  
-----  
DSS 41 A.O.S. 352/0549 L.O.S. 352/1329 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0746-0827Z-360/75 DOWN-SCHEDULED STRING SWAP "A" TO "B"  
1310-1343Z 360/75 DOWN-S/C 75 TLM PROCESS STOPPED AT 1257Z  
WHEN S/C 85 PROCESS ENTERED FOR DSS-62 DATA XFER TEST-COLD  
IPL AND WARM RESTART REQ-DR2672  
NO LOS READINGS-IN OCCULTATION - CMDS XMTD 0628-1328Z  
\* AOS DELAYED FOR CMD RECALLS-2 WAY TRK-0610-1328Z

PASS 0203 DEC 18,1971 DEC 18,1971 DAY 352 352  
-----  
DSS 62 A.O.S. 352/1345 L.O.S. 352/2040 COMMANDS 357 RANGING NIL

DEVIATIONS OR ANOMALIES

1310-1343Z-360 DOWN-S/C 75 TLM PROCESS STOPPED AT 1257Z WHEN  
S/C 85 PROCESS ENTERED FOR DSS-62 DATA XFER TEST-COLD IPL  
AND WARM RESTART REQ-DR2672  
1351-1355Z-360/75 DOWN-UNABLE TO PROCESS TLM-CANCELLED R/T  
JOB-FORCE "R" DUMP-DR2672 REFERS  
UNSUCCESSFUL-UNABLE TO ACCESS 360-BY MED ENTRIES.  
A COLD IPL AND COLD MISSION RESTART WILL BE ATTEMPTED  
AFTER SDR TAPES ARE WRITTEN.  
1416-1422Z-360/75 DOWN-COLD IPL AND COLD MISSION RESTART REQ  
REF DR2672  
1824-1825Z LOST GODDARD CP-NO DATA LOSS-REF C4263

PASS 0203 DEC 18,1971 DEC 18,1971 DAY 352 352  
-----  
DSS 51 A.O.S. 352/1359 L.O.S. 352/1800 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1416-1422Z 360/75 DOWN-UNABLE TO PROCESS TLM DATA-COLD IPL  
AND COLD MISSION MISSION RESTART REQ-DR2672-DR-T-44  
WRITTEN ON LOW SNR VS PRDX IN THE ENG DATA  
DOPPLER BIAS HIGH DUE TO DIFFERENCE BETWEEN ACTUAL AND  
PREDICTED TSF'S

PASS 0203 DEC 18,1971 DEC 19,1971 DAY 352 353  
-----  
DSS 12 A.O.S. 352/2016 L.O.S. 353/0425 COMMANDS 14 RANGING MU

DEVIATIONS OR ANOMALIES

2016-2122Z DIS DOWN-PROBLEM LOADING DIS/MON PROGRAM-CHANGE  
OF PROGRAM TAPE AND RELOAD CLEARED PROBLEM DR C-0337  
MANUAL CMDS DUE 360 DOWN  
2017-0116Z TDH SAMPLING RATE PROBLEM-CAUSE UNDER INVESTIGA-  
TION DR T-1715 REFERS  
2305-2317Z 360/75 DOWN-I/O ERROR ON MSD PACK-2260'S LOCKED  
OUT OF SYSTEM-WARM IPL AND RESTART-DR2674  
2325Z-2359Z AND 0011-0030Z 360/75 DOWN-REF DR2672 (TLM PRO-  
CESS HUNG UP)  
0057-0109Z 360/75 DCWN-AFTER NATTRK ENTERED MED (R83, 75,  
AL) SYSTEM DIED- IPL AND RESTART REQ-DR2675 REFERS  
2 WAY TRK-2040-0425Z CMDS XMTD 2101-0418Z

PASS 0203 DEC 18,1971 DEC 19,1971 DAY 352 353  
-----  
DSS 14 A.O.S. 352/2017 L.O.S. 353/0706 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2305-2317Z 360/75 DOWN-I/O ERROR ON MSD PACK-2260'S LOCKED OUT OF SYSTEM-WARM IPL AND RESTART-DR2674  
2325-2359Z 360/75 DOWN-TLM PROCESS HUNG UP-IPL AND RESTART REQ-DR2672  
0011-0030Z-360/75 DOWN-TLM PROCESS HUNG UP-IPL AND RESTART REQ-DR2672  
0057-0109Z-360/75 DOWN-AFTER NATTRK ENTERED MED (R83,75,AL)  
SYSTEM DIED - IPL AND RESTART REQ-DR #2672 REFERS  
0405-0417Z TCP-B PROGRAM HALTED-RELOAD REQ-DR T-1716 REFERS  
3 WAY TRK-NO CMDS

PASS 0203 DEC 19,1971 DEC 19,1971 DAY 353 353  
-----  
DSS 41 A.O.S. 353/0335 L.O.S. 353/1326 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

0504Z TCP-A-CMD PROGRAM ANOMALIES-RELOAD REQ-NO DR  
0707-0714Z 360/75 DOWN-LOCKED OUT OF SYSTEM-STRING SWAP "B"  
TO "A"-DR2675 REFERS  
0728-0737Z 360/75 DOWN-LOCKED OUT OF SYSTEM-IPL REQ-DR2675  
REFERS  
0744-0814Z 360/75 DOWN-LOCKED OUT OF SYSTEM-SWAPPING ALL  
DISC PACKS EXCEPT MSD-COLD IPL-DR2675  
0819-1024Z 360/75 DOWN-LOCKED OUT OF SYSTEM-AFTER R84 MED  
ENTRY-MSD PACK SATURATED-SWAPPED MSD PACKS "A" SYSTEM  
LOST POWER-POWER RESTORED-FRESH MSD PACK ON SYSTEM-DR2675  
REFERS  
2 WAY TRK-0425-1326Z CMDS XMTD 0443-1326Z

PASS 0204 DEC 19,1971 DEC 20,1971 DAY 353 354  
-----  
DSS 62 A.O.S. 353/1341 L.O.S. 354/2035 COMMANDS 202 RANGING NIL

DEVIATIONS OR ANOMALIES

IN OCCULTATION AT AOS  
1605-1621Z 360/75 DOWN FOR RESTART-IPL-COLD START-DR2676  
1353-2035Z 2 WAY  
1337-2030Z CMD XMIT

PASS 0204 DEC 19,1971 DEC 20,1971 DAY 353 354  
-----  
DSS 12 A.O.S. 353/2014 L.O.S. 354/0420 COMMANDS 15 RANGING MU

DEVIATIONS OR ANOMALIES

2253-2309Z 360/75 DOWN-WARM RESTART-REFERENCE DR2677  
2340-0037Z 360/75 DOWN-DR2675-BROUGHT UP ON 12.5 VERSION

PASS 0204 DEC 19,1971 DEC 20,1971 DAY 353 354  
-----  
DSS 14 A.O.S. 353/2015 L.O.S. 354/0703 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2253-2309 360/75 DOWN-WARM RESTART-REFERENCE DR2677  
2340-0037 360/75 DOWN-BROUGHT UP ON 12.5 VERSION-DR2675  
3 WAY TRK-NO CMDS

PASS 0204 DEC 20,1971 DEC 20,1971 DAY 354 354  
-----  
DSS 41 A.O.S. 354/0349 L.O.S. 354/1325 COMMANDS 23 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-0420-1325Z CMDS XMTD 0438-1325Z

PASS 0204 DEC 20,1971 DEC 20,1971 DAY 354 354  
-----  
DSS 42 A.O.S. 354/1005 L.O.S. 354/1200 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0205 DEC 20,1971 DEC 20,1971 DAY 354 354  
-----  
DSS 62 A.O.S. 354/1338 L.O.S. 354/2045 COMMANDS 173 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS IN OCCULTATION-MISSED 2 WAY AOS DUE LOW XMTR PWR-REF  
DR T-1718  
1500-1508Z 360/75 DOWN-1052'S LOCKED OUT OF SYSTEM-IPL WARM  
START-DR2681  
19J0-FM02, MONITOR, SHOWED "1" CMD ABORT. THERE WERE NO ABRT  
DR1720  
1905-1907-HS DATA DOWN-DR4282  
1935-1944Z-CP "B" DR4287  
DR +1720 ON DIS INDICATING ONE ABORT WHICH DID NOT OCCUR  
1444-2045Z 2 WAY 1434-2039Z CMD XMIT

PASS 0205 DEC 20,1971 DEC 21,1971 DAY 354 355  
-----  
DSS 12 A.O.S. 354/2011 L.O.S. 355/0440 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

D-MOD OUT OF LOCK XFER TEST TO 2030 DR T-1721

PASS 0205 DEC 20,1971 DEC 21,1971 DAY 354 355  
-----  
DSS 12 A.O.S. 354/2011 L.O.S. 355/0440 COMMANDS 20 RANGING MU

DEVIATIONS OR ANOMALIES

\* TRK TIME EXTENDED BY TRK  
DR T-1722 CMD ABORT DUE CMD MOD OFF  
2 WAY TRK 2118-0440Z CMDS XMTD 2249-0207Z

PASS 0205 DEC 21,1971 DEC 21,1971 DAY 355 355  
-----  
DSS 41 A.O.S. 355/0411 L.O.S. 355/1324 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-0440-1324Z CMDS XMTD-0458-1324Z  
0906-0923Z 360/75 DOWN-MODEL IV OFF LINE-MODEL V ON LINE-  
SCHED. TEST CONFIG. NO DR  
1100-1104Z 360/75 DCWN=UNABLE TO ENTER CMD MEDS-RESTART-NO  
DR-TEST CONFIG  
AOS DELAYED DUE TO R/T SCHEDULING OF VCO FREE-RUN TEST

PASS 0206 DEC 21,1971 DEC 21,1971 DAY 355 355  
-----  
DSS 62 A.O.S. 355/1348 L.O.S. 355/2030 COMMANDS 157 RANGING NIL

DEVIATIONS OR ANOMALIES

1456-1523Z-360/75 DOWN-MODEL V TEST CONFIG. OFF LINE-MODEL  
IV ON LINE  
1842-1849Z-ROL DUE TO ANTENNA DRIVE FAILURE DR1724  
1348-1844Z AND 1849-1903Z 2 WAY  
1903-2025Z CMD XMIT

PASS 0206 DEC 21,1971 DEC 21,1971 DAY 355 355  
-----  
DSS 51 A.O.S. 355/1350 L.O.S. 355/1800 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1456-1523Z-360/75 DOWN-MODEL V TEST CONFIG. OFF-LINE-MODEL  
IV ON-LINE

PASS 0206 DEC 21,1971 DEC 22,1971 DAY 355 356  
-----  
DSS 12 A.O.S. 355/2009 L.O.S. 356/0410 COMMANDS 17 RANGING MU

DEVIATIONS OR ANOMALIES

2047-2122Z 360/75 DOWN FOR VERSION SWAP TO 12.7 NO DR  
2 WAY TRK 2046-0410Z CMDS XMTD 2246-0146Z

PASS 0206 DEC 21,1971 DEC 22,1971 DAY 355 356  
-----  
DSS 14 A.O.S. 355/2010 L.O.S. 356/0658 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2047-2122Z 360/75 DOWN FOR VERSION SWAP TO 12.7 NO DR  
3 WAY TRK-NO CMDS

PASS 0206 DEC 22,1971 DEC 22,1971 DAY 356 356  
-----  
DSS 41 A.O.S. 356/0340 L.O.S. 356/1324 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP RELOAD 0616Z DUE TO CMD PROBLEMS-DR-C-065. 2 WAY TRK  
0410-1305Z CMDS XMTD 0427-1305Z  
0711-0745Z 360/75 DOWN-DOA AND COMPUTER HEAVILY BACKLOGGED-  
IPL AND RESTART-DR2698  
0806-0823Z-360/75 DOWN-MODEL IV OFF-LINE-MODEL IV ON-LINE  
TEST CONFIG-SCHEDULED-NO DR  
1111-1152Z-360/75 DOWN-CANCELLED R/T JOB-FORCE "R" DUMP-  
IPL-RESTART-NO DR  
1304-1316Z-360/75 DOWN-IO'S LOCKED OUT OF SYSTEM-IPL-RESTART  
NO DR IN OCCULTATION AT LOS

PASS 0207 DEC 22,1971 DEC 22,1971 DAY 356 356  
-----  
DSS 62 A.O.S. 356/1312 L.O.S. 356/2030 COMMANDS 159 RANGING NIL

DEVIATIONS OR ANOMALIES

1342-1407Z 360/75 DOWN-JO'S LOCKED OUT OF SYSTEM-MODEL V  
OFF-LINE-MODEL IV VER 12.7 ON LINE-NO DR  
1630-1634Z HS PRT 473 DOWN FF-DR2700  
1655-1823Z SFOF ON GENERATOR POWER  
1403-2030Z 2 WAY  
1346-2025Z CMD XMIT

PASS 0207 DEC 22,1971 DEC 23,1971 DAY 356 357  
-----  
DSS 12 A.O.S. 356/2006 L.O.S. 357/0410 COMMANDS 11 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK 2048-0430 CMD XMIT 2244-0155Z  
0020-0027Z 360 DOWN, CORE LOCKOUT, DR2704  
0247-0306Z 360 DOWN, SOFTWARE PROBLEM, DR2706

PASS 0207 DEC 22,1971 DEC 23,1971 DAY 356 357  
-----  
DSS 14 A.O.S. 356/2008 L.O.S. 357/0700 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0020-0027Z-360 DOWN, CORE LOCKOUT, DR2704  
0247-0306Z-360 DOWN, SOFTWARE PROBLEM, DR2706  
3 WAY TRK-NO CMPS

PASS 0207 DEC 23,1971 DEC 23,1971 DAY 357 357  
-----  
DSS 41 A.O.S. 357/0335 L.O.S. 357/1335 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-0428-1324Z {8HR 56MIN} CMDS XMITD-0426-1305Z  
0951-1005Z 360/75 DOWN-ERRORS ON MSE AND MSD PACKS-WARM IPL  
RESTART-DR2707

PASS 0208 DEC 23,1971 DEC 23,1971 DAY 357 357  
-----  
DSS 62 A.O.S. 357/1230 L.O.S. 357/2025 COMMANDS 127 RANGING NIL

DEVIATIONS OR ANOMALIES

1511-1516Z 360/75 DOWN-ERRORS ON MSA, MSE, MSD DISC PAKS.  
WARM IPL-RESTART-DR2707

PASS 0208 DEC 23,1971 DEC 24,1971 DAY 357 358  
-----  
DSS 12 A.O.S. 357/2004 L.O.S. 358/0600 COMMANDS 16 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK: 2043-0600 CMD XMIT: 2037-0548Z  
2030Z TCP INTERFACE DOWN AS NO TLM DATA PROCESSED

PASS 0208 DEC 23,1971 DEC 24,1971 DAY 357 358

DSS 14 A.O.S. 357/2006 L.O.S. 358/0702 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0129-0140Z TCP-8 PROGRAM HALTED-RELOADED DR T-1727  
3 WAY TRK-MU CMDS

PASS 0208 DEC 24,1971 DEC 24,1971 DAY 358 358

DSS 41 A.O.S. 358/0525 L.O.S. 358/1334 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-0600-1245Z CMDS XMTD-0612-1232Z  
0614-0613Z-360 DOWN, BACKLOGGING, IPL REQ, DR2709

PASS 0209 DEC 24,1971 DEC 24,1971 DAY 358 358

DSS 62 A.O.S. 358/1223 L.O.S. 358/2025 COMMANDS 164 RANGING NIL

DEVIATIONS OR ANOMALIES

1432Z-1444Z 360/75 DOWN-LOCKED OUT OF SYS. FORCED R-DUMP RESTART DR-2708.  
1448Z-1456Z 360/75 DWN LOCKED OUT OF SYS.IPL REQ. RESTART DR-2708.  
1500Z-1513Z 360/75 DWN LOCKED OUT OF SYS.COLD IPL COLD START DR-2712 2-WAY 1303Z-2025Z CMD TRK 1529Z-1706Z

PASS 0209 DEC 24,1971 DEC 25,1971 DAY 358 359

DSS 12 A.O.S. 358/2000 L.O.S. 359/0620 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY-2044-0620Z CMD XMIT 2058-0550Z  
2217-2231Z 360 DOWN, REF DR2713

PASS 0209 DEC 24,1971 DEC 25,1971 DAY 358 359

DSS 14 A.O.S. 358/2004 L.O.S. 359/0702 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2217-2235Z 360/75 DOWN LOCKED OUT OF SYSTEM-IPL-DR2713

PASS 0209 DEC 25,1971 DEC 25,1971 DAY 359 359

DSS 41 A.O.S. 359/0528 L.O.S. 359/1330 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

1210-1214Z CARD READER (474) WOULD NOT TAKE CARDS. TROUBLE  
WITH 2914  
0903-1330Z 2 WAY  
0852-1325Z CMD XMIT

PASS 0210 DEC 25,1971 DEC 25,1971 DAY 359 359  
-----  
DSS 62 A.O.S. 359/1230 L.O.S. 359/2040 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

1857-1900Z DIS DOWN HUNG-UP RELOAD-NO DR  
\* EXTENDED TRACK BY TRK CHIEF  
2 WAY TRK

PASS 0210 DEC 25,1971 DEC 26,1971 DAY 359 360  
-----  
DSS 12 A.O.S. 359/1959 L.O.S. 360/0400 COMMANDS 13 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK: 2059-0400Z CMD XMIT TIME: 2235-0135Z  
0012-0020Z 360 DOWN, CORE FRAGMENTATION-DR2716  
0244-0304Z, 360 DOWN, CORE FRAGMENTATION, REFER DR2716

PASS 0210 DEC 25,1971 DEC 26,1971 DAY 359 360  
-----  
DSS 14 A.O.S. 359/2001 L.O.S. 360/0701 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2000-2009Z-NO MONITOR DATA, AGC IN VOLTS; NO TCP/DIS INTER-  
FACE UNTIL 2021, DR T-1720  
0012-0020Z, 360 DOWN, RESTART, CORE FRAGMENTATION-DR2716  
0244-0304Z, 360 DOWN, RESTART, REF DR2716

PASS 0210 DEC 26,1971 DEC 26,1971 DAY 360 360  
-----  
DSS 41 A.O.S. 360/0258 L.O.S. 360/1330 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

0412-1330Z 2 WAY  
0413-1325Z CMD XMIT

PASS 0211 DEC 26,1971 DEC 26,1971 DAY 360 360  
-----  
DSS 62 A.O.S. 360/1230 L.O.S. 360/2020 COMMANDS 144 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK 1349-2020Z CMDS XMTD 1530-1706Z

PASS 0211 DEC 26,1971 DEC 27,1971 DAY 360 361  
-----  
DSS 12 A.O.S. 360/1956 L.O.S. 361/0400 COMMANDS 12 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK 2039-0400Z CMD XMIT TIME: 2232-0132Z

PASS 0211 DEC 26,1971 DEC 27,1971 DAY 360 361

DSS 14 A.O.S. 360/1958 L.O.S. 361/0700 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

NO CMDS  
2325-2328, ROL ANTENNA STOPPED, DUE TO 400 HZ CT BREAKER  
TRIPPED, DR T-1730  
2338-2347Z, TCP B FAULTED, REQ RELOAD, DR T-1731

PASS 0211 DEC 27,1971 DEC 27,1971 DAY 361 361

DSS 41 A.O.S. 361/0325 L.O.S. 361/1330 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0814 PRINTER 473 DOWN-TAKE UP REEL BAD.  
0419-1330Z 2 WAY  
0419-1327Z CMD XMIT

PASS 0212 DEC 27,1971 DEC 27,1971 DAY 361 361

DSS 62 A.O.S. 361/1230 L.O.S. 361/2015 COMMANDS 196 RANGING NIL

DEVIATIONS OR ANOMALIES

1424-1442Z VCO INCORRECT ON TDH; OUT OF TOLERANCE-DR T-1732  
2 WAY TRK 1354-2010Z CMDS XMTD 1530-1826Z

PASS 0212 DEC 27,1971 DEC 28,1971 DAY 361 362

DSS 12 A.O.S. 361/1954 L.O.S. 362/0350 COMMANDS 18 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK: 2029-0350Z CMD XMIT 2227-0226Z

PASS 0212 DEC 27,1971 DEC 28,1971 DAY 361 362

DSS 14 A.O.S. 361/2000 L.O.S. 362/0456 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK NA CMDS: N/A  
0458-0505, 360 DOWN, RESTART, DR 2730

PASS 0212 DEC 28,1971 DEC 28,1971 DAY 362 362

DSS 41 A.O.S. 362/0327 L.O.S. 362/1330 COMMANDS 20 RANGING NIL

DEVIATIONS OR ANOMALIES

0458-0505 360 DOWN,NAT CMD ATTEMPTED TO WRITE SDR-AND CAUSED  
HUNG IN TLM PROCESSOR, RESTART-DR2730  
0614-0623Z 360 DOWN, TAKEN DOWN DUE TO CORE FRAGMENTATION,  
DR2731  
0854-0901Z 360/75 DOWN FOR COLD IPL AND RESTART  
0949-1000Z 360/75 DOWN-IPL DR2731  
1125-1128Z 2260 PROBLEM-NO DTV-CAUSE BY MODEL 5 TEST  
0350-1330Z 2 WAY 0402-1325Z CMD XMIT

PASS 0213 DEC 28,1971 DFC 28,1971 DAY 362 362

DSS 62 A.O.S. 362/1230 L.O.S. 362/2013 COMMANDS 138 RANGING NIL

DEVIATIONS OR ANOMALIES

1417-1426Z GODDARD C.P. DOWN, DR C4333  
1505-1520Z GODDARD C.P. DOWN, DR C4335  
2 WAY TRK 1355-2010Z CMDS XMTD 1530-1940Z

PASS 0213 DEC 28,1971 DEC 28,1971 DAY 362 362

DSS 51 A.O.S. 362/1358 L.O.S. 362/1800 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1417-1426 GODDARD C.P. DOWN, DR C-4333  
1505-1520Z GODDARD C.P. DOWN, DR C-4335

PASS 0213 DEC 28,1971 DEC 29,1971 DAY 362 363

DSS 14 A.O.S. 362/1954 L.O.S. 363/0406 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 2225-2400Z, CMD XMIT: 2301-0142Z  
2339-2351Z 360 DOWN DUET CORE FRAGMENTATION, IPL REQ-DR2735  
0023-0045Z, LOST TCP/DIS INTERFACE, TAKEN DOWN FOR RELOAD  
RCVR AGC IN VOLTS VICE DBM, STA UNABLE TO LOAD DIS WITH AGC  
CURVE FOR CORRECT OUTPUT

PASS 0213 DEC 29,1971 DEC 29,1971 DAY 363 363

DSS 41 A.O.S. 363/0230 L.O.S. 363/1330 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP- BS SNR	TCP BS SNR
ACTUAL-14.8	15.7
PREDIC-15.5	16.4
DIFFER -0.2	-0.7
0521-0530Z 360 DOWN SDR WRITE ATTEMPT CAUSE ADRUM FAILURE	
DR2736	
1038-1047Z TCP PROGRAM HUNG UP-DR1738	
1122-1129Z 360/75 DOWN FOR WARM RESTART	

PASS 0214 DEC 29,1971 DEC 29,1971 DAY 363 363

DSS 62 A.O.S. 363/1234 L.O.S. 363/2320 COMMANDS 177 RANGING NIL

DEVIATIONS OR ANOMALIES

1447-1459Z H/S DATA BAD REF-DR4341  
1439-1442Z RELOAD TCP A, DUE INTERMITTEN DATA DROP-OUTS  
REF DR T-1739  
2145-2148Z 3100 SYSTEM DOWN, RESTART REQ-DR2739  
DSS-62 DID A TCP RELOAD. NAT CMD WAS NOT NOTIFIED. DR C067  
2 WAY TRK 1349-2010Z CMDS XMTD AT 1336-2002Z

PASS 0214 DEC 29,1971 DEC 30,1971 DAY 363 364

DSS 12 A.O.S. 363/1949 L.O.S. 364/0400 COMMANDS 40 RANGING NIL

DEVIATIONS OR ANOMALIES

2145-2148Z 3100 DOWN, RESTART DR2739  
0105-0121Z 360/75 DOWN-SCHEDULED STRING SWAP "A" TO "B"-  
NO DR  
0152-0208Z 360/75 DOWN-LOCKED OUT OF SYSTEM-FORCE "R" DUMP  
WARM IPL-RESTART-DR2742  
0213-0305Z 360/75 DOWN-LOCKED OUT OF SYSTEM-CMD MED C42  
HANGS UP IN SYSTEM-RE IPL-COLD RESTART-DR2742  
ANTENNA OFF POINT-REF PR T 1740  
2 WAY TRK 2010-0400Z CMDS XMTD 2023-0145Z

PASS 0214 DEC 29,1971 DEC 30,1971 DAY 363 364

DSS 14 A.O.S. 363/2302 L.O.S. 364/0659 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

\* LATE AOS DUE TO PROBLEM OF SNOW ON ANTENNA  
0105-0121Z 360/75 DOWN-SCHEDULED STRING SWAP "A" TO "B"-  
NO DR  
0152-0208Z 360/75 DOWN-LOCKED OUT OF SYSTEM-FORCE "R" DUMP  
WARM IPL-RESTART-DR2742  
0213-0305Z 360/75 DOWN-LOCKED OUT OF SYSTEM-CMD MED C-42  
HANGS UP IN SYSTEM-RE IPL-COLD RESTART-DR2742

PASS 0214 DEC 30,1971 DEC 30,1971 DAY 364 364

DSS 41 A.O.S. 364/0322 L.O.S. 364/1250 COMMANDS 21 RANGING NIL

DEVIATIONS OR ANOMALIES

0612-0621Z 360/75 DOWN-I/O ERRORS ON DISIC-WARM IPL-COLD  
RESTART-DR2708

PASS 0215 DEC 30,1971 DEC 30,1971 DAY 364 364

DSS 62 A.O.S. 364/1230 L.O.S. 364/2300 COMMANDS 38 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AE SNR  
ACTUAL-16.2  
PREDIC-16.2  
DIFFER 0.0  
1453-1455 MODEM FAILURE AT GSPC  
2 WAY TRK 1240-2000Z CMDS XMTD 1243-1945Z

PASS 0215 DEC 30,1971 DEC 31,1971 DAY 364 365

DSS 14 A.O.S. 364/1948 L.O.S. 365/0627 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-A SNR TCP-A SNR  
ACTUAL-12.5 5.6  
PREDIC-12.4 6.0  
DIFFER +0.1 -0.4  
0648-0657Z 360/75 DOWN, BACKLOGGING, CANX R/T JOB, FORCE "R"

DUMP, WARM IPL, RESTART-DR2748  
2 WAY TRK-2000-0000Z CMDS XMTD 2005-2355Z

---

PASS 0215 DEC 30,1971 DEC 31,1971 DAY 364 365  
-----  
DSS 12 A.O.S. 364/2117 L.O.S. 365/0715 COMMANDS 55 RANGING NIL

DEVIATIONS OR ANOMALIES

\* AOS DELAYED-MASER 1 COOL DOWN-DR T-1745, TFR 801959 REFERS  
0648-0657Z-360/75 DOWN-BACKLOGGING, CANX R/T JOB, FORCE "R"  
DUMP,-WARM IPL-RESTART-DR2748  
2 WAY TRK 0000-0710Z CMDS XMTD 0010-0655Z

---

PASS 0215 DEC 31,1971 DEC 31,1971 DAY 365 365  
-----  
DSS 41 A.O.S. 365/0641 L.O.S. 365/1330 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS 0641Z-360/75 DOWN  
0648-0657Z 360/75 DOWN BACKLOGGING-CANX R/T FORCE "R" DUMP  
WARM IPL-RESTART-DR2748  
0729-1336 2 WAY  
0729-1315 CMD XMT

---

PASS 0216 DEC 31,1971 DEC 31,1971 DAY 365 365  
-----  
DSS 62 A.O.S. 365/1230 L.O.S. 365/2005 COMMANDS 395 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 1349-2005, CMD XMIT: 1600-1939Z  
1527-1532Z 360 DOWN-WARM RESTART-CAUSED BY OPERATIONAL PROCEDURES  
1537-1541Z 3100 DOWN, RELOAD, DR2739  
1918-1930Z 360 DOWN, IPL REQUIRED WITH WARM RESTART, REF DR2731

---

PASS 0216 DEC 31,1971 JAN 01,1972 DAY 365 001  
-----  
DSS 12 A.O.S. 365/1944 L.O.S. 001/0700 COMMANDS 297 RANGING NIL

DEVIATIONS OR ANOMALIES

0021-0027Z-360/75 DOWN-INCORRECT COMPUTER TIME-COLD IPL-COLD  
RESTART-DR-NCNE  
0239-0241Z UDR LOGGING PROBLEM TCP-A-RELOAD REQ-DR T-1746

---

PASS 0216 DEC 31,1971 JAN 01,1972 DAY 365 001  
-----  
DSS 14 A.O.S. 365/1946 L.O.S. 001/0657 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0021-0027Z 360/75 DOWN-INCORRECT COMPUTER TIME-COLD IPL-COLD  
RESTART-DR-NONE  
3 WAY TRK-NO CMDS

PASS 0216 JAN 01,1972 JAN 01,1972 DAY 001 001  
-----  
DSS 41 A.O.S. 001/0623 L.O.S. 001/1330 COMMANDS 23 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 0719Z-1330Z  
CMDS XMITTED 1049Z-1221Z

PASS 0217 JAN 01,1972 JAN 01,1972 DAY 001 001  
-----  
DSS 62 A.O.S. 001/1230 L.O.S. 001/1925 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

SNOW STORM AT DSS-62, UNABLE TO ACCURATELY RESOLVE TLM  
RESIDUALS  
\* STATION RELEASED DUE HEAVY SNOW STORM  
2 WAY TRK-1330-1925Z  
NO CMDS-CMD MOD ON-1345-1913Z

PASS 0217 JAN 01,1972 JAN 02,1972 DAY 001 002  
-----  
DSS 12 A.O.S. 001/1921 L.O.S. 002/0600 COMMANDS 45 RANGING MU

DEVIATIONS OR ANOMALIES

2335Z-DOPPLER NOISE OUT OF TOLERANCE-NOISY TRACKING DATA-  
DR0341  
0032-0037Z-360/75 DOWN-HEAVILY BACKLOGGED, PRDX RUN, CMD  
ACTIVITY-WARM RESTART-DR2752  
\* EARLY AOS DUE SNOW STORM AT DSS-62 (RELEASED EARLY)

PASS 0217 JAN 01,1972 JAN 02,1972 DAY 001 002  
-----  
DSS 14 A.O.S. 001/1945 L.O.S. 002/0655 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0032-0037Z 360/75 DOWN-HEAVILY BACKLOGGED, PRDX RUN, CMD  
ACTIVITY, WARM RESTART-DR2752  
3 WAY TRK - NO CMDS

PASS 0217 JAN 02,1972 JAN 02,1972 DAY 002 002  
-----  
DSS 41 A.O.S. 002/0526 L.O.S. 002/1330 COMMANDS 32 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK 0620-1330Z CMDS XMTD 0629-1240Z

PASS 0218 JAN 02,1972 JAN 02,1972 DAY 002 002  
-----  
DSS 62 A.O.S. 002/1232 L.O.S. 002/2000 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-1330-2000Z CMDS XMTD AT 1345-1949Z

PASS 0218 JAN 02,1972 JAN 03,1972 DAY 002 003  
-----  
DSS 12 A.O.S. 002/1940 L.O.S. 003/0400 COMMANDS 8 RANGING MU

DEVIATIONS OR ANOMALIES

0137-0145Z CMD DET OUT OF LOOP LOCK-LOSS OF CMDING CAPABILITY-POSSIBLE CAUSE, STA. OFFSET ON ANTENNA 0116:38Z, ALSO COULD HAVE CAUSED LOSS OF CMD. MODULATION-NO DR  
2 WAY TRK-2000-0345Z CMDS XMTD 2000-0345Z

PASS 0218 JAN 02,1972 JAN 03,1972 DAY 002 003  
-----  
DSS 14 A.O.S. 002/1941 L.O.S. 003/0654 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0633-0638Z 360/75 DOWN-SCHED. STRING SWAP "A" TO "B"-NO DR  
3 WAY TRACK NO CMDS

PASS 0218 JAN 03,1972 JAN 03,1972 DAY 003 003  
-----  
DSS 41 A.O.S. 003/0330 L.O.S. 003/1300 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0633-0638Z-360/75 DOWN-SKED STRING SWAP-"A" TO "B"-NO DR  
0908-0922Z-360/75 DOWN-DUE RTJS ABENDING; DUMP AND WARM  
START REQ-DR2755  
2 WAY TRK 0420-1300Z CMDS XMTD 0534-1212Z

PASS 0219 JAN 03,1972 JAN 03,1972 DAY 003 003  
-----  
DSS 62 A.O.S. 003/1230 L.O.S. 003/2000 COMMANDS 170 RANGING NIL

DEVIATIONS OR ANOMALIES

1703-1712Z LOW SPEED DATA FROM GODDARD DOWN-DR4365

PASS 0219 JAN 03,1972 JAN 03,1972 DAY 003 003  
-----  
DSS 51 A.O.S. 003/1351 L.O.S. 003/1800 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1201-1212Z LOW SPEED DATA FROM GODDARD DOWN-DR4363

PASS 0219 JAN 03,1972 JAN 04,1972 DAY 003 004  
-----  
DSS 12 A.O.S. 003/1937 L.O.S. 004/0400 COMMANDS 16 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK-2000-0400Z CMDS XMTD-2011-0345Z

PASS 0219 JAN 03,1972 JAN 04,1972 DAY 003 004  
-----  
DSS 14 A.O.S. 003/1940 L.O.S. 004/0653 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0003-0511Z TDH SUBSYSTEM FAILED-LOST 5HR 11MIN TRACKING DATA  
STA REPAIRED-FOUND BAD CARDS. REF DR0343  
DIS LOG TAPE RED ENTIRE PASS-REF DR T-1747  
DR T-1748  
DR T-45 ON LOW 16.2KBPS SNR RSID

PASS 0219 JAN 04,1972 JAN 04,1972 DAY 004 004  
-----  
DSS 41 A.O.S. 004/0330 L.O.S. 004/1300 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 0420Z-1300Z  
CMDS XMITTED 0532Z-1211Z

PASS 0219 JAN 04,1972 JAN 04,1972 DAY 004 004  
-----  
DSS 42 A.O.S. 004/0959 L.O.S. 004/1200 COMMANDS 0 RANGING NIL  
DEVIATIONS OR ANOMALIES

PASS 0220 JAN 04,1972 JAN 04,1972 DAY 004 004  
-----  
DSS 62 A.O.S. 004/1230 L.O.S. 004/1955 COMMANDS 170 RANGING NIL  
DEVIATIONS OR ANOMALIES

1713Z DSS-62 SWITCHED FROM TCP "A" TO TCP "B" SCHEDULE  
SWITCH  
TLM DR T46 D/L DECREASED BY 1.0DB AFTER MERIDIAN XING  
(1746Z)  
1320-1955Z 2 WAY  
1320-1940Z CMD XMIT

PASS 0220 JAN 04,1972 JAN 05,1972 DAY 004 005  
-----  
DSS 12 A.O.S. 004/1930 L.O.S. 005/0500 COMMANDS 22 RANGING MU  
DEVIATIONS OR ANOMALIES

2215-2227Z-360/75 DOWN FOR WARM RESTART AND IPL-DR2639  
2238-2249Z-360/75 DOWN FOR WARM RESTART AND IPL-DR2639  
\* LATE AOS DUE STATION 41 PROBLEMS OF LOCKING ON 2KBS DATA  
2 WAY TRK-1955-0430Z CMDS XMTD 2010-0415Z

PASS 0220 JAN 04,1972 JAN 04,1972 DAY 004 004  
-----  
DSS 14 A.O.S. 004/1937 L.O.S. 004/2300 COMMANDS 0 RANGING NIL  
DEVIATIONS OR ANOMALIES

2215-2227Z 360/75 DOWN-IPL, WARM RESTART, REF-DR2639  
2238-2249Z 360/75 DOWN-IPL, WARM RESTART, REF-DR2639

\* DSS-14 RELEASED AT 2300Z TO CORRECT AN ANTENNA BEARING  
PROBLEM. ESTIMATED TIME REQUIRED

PASS 0220 JAN 05,1972 JAN 05,1972 DAY 005 005  
-----  
DSS 41 A.O.S. 005/0330 L.O.S. 005/1300 COMMANDS 19 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK 0420-1300Z CMDS XMTD 0532-2111Z  
URE BETWEEN CANBERRA AND STA, REF DR'S-4386,4387,4388.  
0556-0603Z-36/75 DOWN-CMD SDR TAPE WRITE PROBLEMS-COLD IPL  
COLD RESTART-DR2752  
2 WAY TRK 0450-1300Z

PASS 0221 JAN 05,1972 JAN 05,1972 DAY 005 005  
-----

DSS 62 A.O.S. 005/1230 L.O.S. 005/1955 COMMANDS RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0221 JAN 05,1972 JAN 06,1972 DAY 005 006  
-----

DSS 12 A.O.S. 005/1930 L.O.S. 006/0400 COMMANDS 10 RANGING MU

DEVIATIONS OR ANOMALIES

2111:59Z-2112:01Z 360/75 CMD PROCESSOR ALLOWED TWO CMDS TO  
BE TRANSMITTED WITHIN FIVE (5) SEC OF EACH OTHER-THE TCP  
REJECTED BOTH FOR ILLEGAL PRIORITY. BOTH CMDS WERE DE  
LAYED. DR C074  
2 WAY 2015-0356Z CMDS XMTD 2006-0345Z

PASS 0221 JAN 05,1972 JAN 06,1972 DAY 005 006  
-----

DSS 14 A.O.S. 005/1935 L.O.S. 006/0625 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2158-2210Z-360/75 DOWN-RESTART-NO DR  
0555-0608Z-360/75 DOWN-I/O SYSTEM LOCKED OUT-DR2752  
0650-0655Z-360/75 DOWN-WARM RT JOB STEP-DR2708

PASS 0221 JAN 06,1972 JAN 06,1972 DAY 006 006  
-----

DSS 41 A.O.S. 006/0330 L.O.S. 006/1300 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

0555-0608Z 360/75 DOWN, I/O SYST LOCKOUT DR2752  
0650-0655Z 360/75 DOWN, WARM RT JOB STEP DR2708  
2 WAY TRK 0420-1300Z CMDS XMTD 0457-1208Z

PASS 0222 JAN 06,1972 JAN 06,1972 DAY 006 006

DSS 62 A.O.S. 006/1230 L.O.S. 006/1950 COMMANDS 181 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B 1220 1 13 0

PASS 0222 JAN 06,1972 JAN 07,1972 DAY 006 007

DSS 12 A.O.S. 006/1930 L.O.S. 007/0500 COMMANDS 8 RANGING MU

DEVIATIONS OR ANOMALIES

2007-2028Z NO HSDL GCF SWAP SYNCHRON AND 360/75 DID NOT  
0123Z-DSN DIV FORMATS NOT UPDATING 360 PROB SEE NEXT ENTRY  
0149-0155Z 360/75 DOWN-WARM RESTART-DR2775  
0354-0410Z 360/75 DOWN-WARM RESTART-DR2776  
2 WAY 2010-0452Z  
CMD 2001-0445Z

PASS 0222 JAN 06,1972 JAN 07,1972 DAY 006 007

DSS 14 A.O.S. 006/1932 L.O.S. 007/0651 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0123Z DSN DTV FMTS NOT UPDATING PROBLEM 360/75-3100 INTERFACE  
0149-0155Z 360/75 DOWN TO CLEAR DIV PROBLEM; WARM RESTART  
DR2775  
0354-0410Z 360/75 DOWN-WARM RESTART-DR2776

PASS 0222 JAN 07,1972 JAN 07,1972 DAY 007 007

DEVIATIONS OR ANOMALIES

0715-0840Z 360/75/3100 PROBLEMS, LOST DSN DIV FMT CAPABILITY  
GOING TO SKED STRING SWAP TO "A"  
0846-0856Z 360/75 DOWN; COLD IPL WARM RESTART-NO DR  
1040-1047Z TCP RE-LOAD DUE CMD PROBLEMS REF DR C-038  
1027-1032Z 360/75 DOWN FOR RESTART, DUE NATTRK NOT LOGGING  
DR2778  
1259-1306Z 360/75 DOWN FOR RESTART, DUE NATTRK NOT LOGGING  
DR2780  
2WAY TRK 0520-1300Z CMDS XMTD 0530-1207Z

PASS 0223 JAN 07,1972 JAN 07,1972 DAY 007 007

DSS 62 A.O.S. 007/1230 L.O.S. 007/1950 COMMANDS 260 RANGING NIL

DEVIATIONS OR ANOMALIES

1827-1833Z 360/75 DOWN-CMD SDR LOGGING PROBLEM, COLD IPL,  
WARM RESTART-DR2752  
1844-1850Z 360/75 DOWN-CMD SDR LOGGING PROB, COLD IPL,  
RESTART-DR2752  
1935-1943Z HSDL DOWN-RETRAIN REQ FRCM STA-REF-DR4429  
2 WAY TRK-1300-1950Z CMDS XMTD 1315-1935Z

PASS 0223 JAN 07,1972 JAN 08,1972 DAY 007 008  
-----  
DSS 12 A.O.S. 007/1928 L.O.S. 008/0426 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

2249-2258Z HSDL DOWN-MADR MICROWAVE FAILURE BETWEEN SHADOW  
MTN AND GOLDSTCNE-REF DR4431  
2258-2305Z 360/75 DOWN-DOA PROBLEMS-COLD IPL-WARM RESTART  
REQ-DR2753  
0319-0339Z 360/75 DOWN, KEYBOARD LOCKOUT WARM RE-START  
DR2782 CMD XMIT 2000-0400 2 WAY 2000-0426

PASS 0223 JAN 07,1972 JAN 08,1972 DAY 007 008  
-----  
DSS 14 A.O.S. 007/1929 L.O.S. 008/0650 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2258-2305Z-360/75 DOWN-DOA PROBLEMS-COLD IPL-WARM RESTART  
REQ-DR2753  
0319-0399Z 360/75 DOWN-KEYBOARD LOCKOUT WARM RESTART-DR2782  
0522-0535Z 360/75 DOWN, TAPE DRIVE LOCKOUT WARM RESTART  
DR2783

PASS 0223 JAN 08,1972 JAN 08,1972 DAY 008 008  
-----  
DSS 41 A.O.S. 008/0430 L.O.S. 008/1230 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

0522-0535Z 360/75 DCWN-TAPE DRIVE LOCKOUT DR2783  
0825-0827Z 360/75 DOWN-SWITCHED TO STRING "B"-SCHEDULED  
SWITCHED. 0809 C.P. SWAP  
0931-0932Z 360/75 DOWN FOR COLD IPL-REF DR2785  
0500-1000Z CMD TRANSMISSION PROBLEMS-DR2785  
TLM: RAIN STORMS AT DSS-41

PASS 0224 JAN 08,1972 JAN 08,1972 DAY 008 008  
-----  
DSS 62 A.O.S. 008/1200 L.O.S. 008/1945 COMMANDS 150 RANGING NIL

DEVIATIONS OR ANOMALIES

1346-1348Z CMA SUBCARRIER FREQ. FO CHANGED AFTER D/XFER TEST  
FROM 255.4 TO 255.3, STA 62 OPR ERROR-DR T-1756  
1359Z-TXR OFF-ARC DETECTOR ALARM-REF-DR T-1757  
USED MASER 2  
2 WAY TRK-1230-1945Z CMDS XMTD 1245-1930Z

PASS 0224 JAN 08,1972 JAN 09,1972 DAY 008 009  
-----  
DSS 12 A.O.S. 008/1925 L.O.S. 009/0600 COMMANDS 10 RANGING MU

DEVIATIONS OR ANOMALIES

2331-2345Z CMD MDR AND SDR TAPES NOT LOGGING-COLD IPL AND  
COLD RESTART-DR2787  
2 WAY 1906-0552Z CMDS 1956-0545Z

PASS 0224 JAN 08,1972 JAN 09,1972 DAY 008 009  
-----  
DSS 14 A.O.S. 008/1927 L.O.S. 009/0650 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2331-2345Z CMD MDR AND SDR NOT LOGGING-COLD IPL AND COLD  
RESTART-DR2787  
0639-0651 360/75 DOWN-WARM IPL-DR2752  
0649 STATION LOS

PASS 0224 JAN 09,1972 JAN 09,1972 DAY 009 009  
-----  
DSS 41 A.O.S. 009/0530 L.O.S. 009/1230 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0639-0651Z 360/75 DOWN WARM IPL-DR2752  
0655-0656 HSDL DOWN-DR4446  
0734-0740Z 360/75 FOR STRING SWAP B TO A-NO DR  
0743-0755Z 360/75 DOWN-WARM IPL-NO DR  
1017-1022Z 360/75 DOWN-COLD START  
TLM: RAIN STORMS IN WOOMERA

PASS 0225 JAN 09,1972 JAN 09,1972 DAY 009 009  
-----  
DSS 62 A.O.S. 009/1200 L.O.S. 009/1945 COMMANDS 140 RANGING NIL

DEVIATIONS OR ANOMALIES

1251Z U/L LOST DURING STA TRANSFER, EXC/SYNTH LOOP SHORTED  
TWO SECONDS AFTER TUNING BEGAN-DR T-1759  
2-WAY TRK-1230-1945Z CMDS XMTD 1245-1930Z

PASS 0225 JAN 09,1972 JAN 10,1972 DAY 009 010  
-----  
DSS 12 A.O.S. 009/1923 L.O.S. 010/0400 COMMANDS 10 RANGING MU

DEVIATIONS OR ANOMALIES

2314-0010Z TCP-A ODR LOST LOGGING CAPABILITY, RELOAD OF TCP  
PROGRAM REQ, DELAYED DUE TO COMMANDING ACTIVITY, REF  
DR1760

PASS 0225 JAN 09,1972 JAN 10,1972 DAY 009 010  
-----  
DSS 14 A.O.S. 009/1927 L.O.S. 010/0649 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0225 JAN 10,1972 JAN 10,1972 DAY 010 010  
-----  
DSS 41 A.O.S. 010/0326 L.O.S. 010/1230 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

1659-0715Z 360 DOWN WARM IPL WARM RESTART-DR2791  
0737Z DSS 41 SWITCHED TCP-B TO TCP-A. SCIENCE DATA WOULD  
NOT SYNC. ON TCP B. DR T 1761

PASS 0226 JAN 10,1972 JAN 10,1972 DAY 010 010  
-----  
DSS 62 A.O.S. 010/1200 L.O.S. 010/1945 COMMANDS 186 RANGING NIL

DEVIATIONS OR ANOMALIES

776 12  
1746 SWAPPED TO TCP-B AS PRIME, SPECIAL TLM PLAYBACK TEST  
NO DR 2-WAY TRK 1230-1945Z CMDS XMTD 1233-1930Z

PASS 0226 JAN 10,1972 JAN 11,1972 DAY 010 011  
-----  
DSS 12 A.O.S. 010/1921 L.O.S. 011/0400 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC  
ACTUAL-152.5  
PREDIC-152.3  
DIFFER -0.2  
2308-2317Z 360/75 DOWN, LOCKED OUT OF SYSTEM WARM RESTART  
DR2802

PASS 0226 JAN 10,1972 JAN 11,1972 DAY 010 011  
-----  
DSS 14 A.O.S. 010/1926 L.O.S. 011/0648 COMMANDS NA RANGING NIL

DEVIATIONS OR ANOMALIES

RX 1 TCP AE SNR  
ACTUAL-11.6 11.6/7.6  
PREDIC-11.4 11.4/8.0  
DIFFER +0.2 +0.2/0.4  
2002-2008Z MONITOR DATA DIS/TCP DATA STOPPED  
2144Z TCP B STOPPED-STA RELEASED BY PROJ FOR REPAIR OF TCP-B  
HIGH DENSITY RECORDER  
2253-2303Z LOST ALL HSD, REASON UNKNOWN-CLEARED WHILE CHECK-  
ING-NO DR  
2308-2317Z 360/75 DOWN-LOCKED OUT OF SYSTEM. WARM RESTART  
DR2802  
2353Z D/S PROGRAM HALTED. RELOAD REQ-NO DR  
2346-0014Z BIL/BOL (ENG DATA) INDICATION APPARENTLY CAUSED  
BY STRESS IN SOA AFTER TCP SWAP-DR T-1763

PASS 0226 JAN 11,1972 JAN 11,1972 DAY 011 011  
-----  
DSS 41 A.O.S. 011/0325 L.O.S. 011/1230 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

0428-1230Z 2 WAY  
0428-1215Z CMD XMIT

PASS 0227 JAN 11,1972 JAN 11,1972 DAY 011 011  
-----  
DSS 62 A.O.S. 011/1200 L.O.S. 011/1940 COMMANDS 177 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-1230-1940Z CMDS XMTD 1235-1925Z

PASS 0227 JAN 11,1972 JAN 12,1972 DAY 011 012  
-----  
DSS 12 A.O.S. 011/1918 L.O.S. 012/0435 COMMANDS RANGING NIL

DEVIATIONS OR ANOMALIES

1940-1942Z 3100 HUNG UP-RESTART REQUIRED-NO DR  
2239-2246Z 360/75 DOWN-WARM RESTART-DR2731  
2 WAY 2001-0435  
CMD 1951-0420Z

PASS 0227 JAN 11,1972 JAN 12,1972 DAY 011 012  
-----  
DSS 14 A.O.S. 011/1920 L.O.S. 012/0647 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

1940-1942Z 3100 HUNG UP-RESTART REQ. NO DR  
2239-2246Z 360/75 DOWN-WARM RESTART-DR2731

PASS 0227 JAN 12,1972 JAN 12,1972 DAY 012 012  
-----  
DSS 41 A.O.S. 012/0327 L.O.S. 012/1215 COMMANDS 1 RANGING NIL  
DEVIATIONS OR ANOMALIES

0750-0753Z LOST DSN DTV CAPABILITY  
0913-0922Z 360/75 DOWN- WARM RESTART DR 2811

PASS 0228 JAN 12,1972 JAN 12,1972 DAY 012 012  
-----  
DSS 62 A.O.S. 012/1128 L.O.S. 012/1940 COMMANDS 95 RANGING NIL  
DEVIATIONS OR ANOMALIES

1717Z-1730Z-360/75 DOWN-CORE FRAG PROBS-WARM IPL-WARM RESTART-  
DR2731  
2 WAY TRACK-1213Z-1940 CMDS XMTD 1222Z-1925Z

PASS 0228 JAN 12,1972 JAN 12,1972 DAY 012 012  
-----  
DSS 51 A.O.S. 012/1355 L.O.S. 012/1800 COMMANDS 1L RANGING NIL  
DEVIATIONS OR ANOMALIES

1717Z-1730Z-360/75 DOWN-CORE FRAG PROBS WARM RESTART-DR2731  
S/L -2.5DB DR T-49  
3 WAY TRK-NO CMDS

PASS 0228 JAN 12,1972 JAN 13,1972 DAY 012 013  
-----  
DSS 12 A.O.S. 012/1916 L.O.S. 013/0400 COMMANDS 2 RANGING NIL  
DEVIATIONS OR ANOMALIES

0328-0338Z-360/75 DOWN TOTAL SYSTEM LOCK-OUT-WARM IPL/WARM RE  
-START-DR# 4776  
2-W TK 2001-0400Z CMDS XMTD 2155-0021Z

PASS 0228 JAN 12,1972 JAN 13,1972 DAY 012 013  
-----  
DSS 14 A.O.S. 012/1918 L.O.S. 013/0646 COMMANDS RANGING NIL

DEVIATIONS OR ANOMALIES

TELEM TCP 16.2K SNR      TCP 8.1K SNR  
ACTUAL- 4.4                7.4  
PREDIC- 5.2                7.8  
DIFFER- -0.8               -0.4  
2051Z-TCP-B TAPE WRITE SUB-ROUTINE HUNG-UP-RELOAD DR T-1768  
0129Z-TCP-B LOST ODR TAPE LOG CAPABILITY RELOAD DR T-1769  
0328-0338Z-360/75 DOWN TOTAL SYSTEM IO LOCK-OUT WARM IPL/RESTA  
RT DR 4776  
0417-0424Z-360/75 DOWN RECOVERY DUE TLM POCESS B/L WARM IPL DR  
2752  
0505-0521Z-360/75 DOWN TLM PROCESS B/L COLD IPL DR 2676

PASS 0228 JAN 13,1972 JAN 13,1972 DAY 013 013  
-----  
DSS 41 A.O.S. 013/0324 L.O.S. 013/1230 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

0328-0338Z 360/75 DOWN TOTAL SYSTEM LOCKOUT-WARM IPL/WARM REST  
ART DR 4776  
0343Z TCP-A RELOAD DUE TO CMD. PROBLEMS  
0417-0424Z-360/75 DOWN RECOVERY DUE TLM PROCESSB/L WARM IPL DR  
2752  
0505-0521Z-360/75 DOWN TLM PROCESS B/L COLD IPL DR 2676  
0545Z TCPA RELOAD; DUE TO CMD. PROBLEMS; EXCITER FREQ. OFF. RE  
F DR C-077  
1141-1209-360/75 DOWN STRING SWAP DR 2822  
0536-TX OF STDL TO STA. 41 CHGD.EXC.FREQ. AND S/C ID IN ERROR.  
DR. REF. C077

PASS 0229 JAN 13,1972 JAN 13,1972 DAY 013 013  
-----  
DSS 62 A.O.S. 013/1200 L.O.S. 013/1935 COMMANDS 144 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK:  
CMD XMIT: 1530Z TO 1639Z  
1141-1209,360 DOWN-STRING SWAP-DR 2822

PASS 0229 JAN 13,1972 JAN 14,1972 DAY 013 014  
-----  
DSS 12 A.O.S. 013/1914 L.O.S. 014/0500 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2308-2324Z-360 DOWN, RESTART WITH COLD IPL. REQUIRED, CORE FRA  
G. DR 2824  
0331-0339Z-360/75B T/DOWN DUE 2260 DEVICE PROBLEM-W/IPL DR2824  
0402-0422Z CP/360 INTERFACE PROBLEMS DR'S 4527-4528  
NATEL DR T-51 D/L-1.1 DB BELOW PRDX.  
2-WTK 1956-0500  
CMDS XMTD @2130-0004

PASS 0229 JAN 13,1972 JAN 14,1972 DAY 013 014

DSS 14 A.O.S. 013/1916 L.O.S. 014/0645 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TELEM TCP 8.1K TCP 16.2K  
ACTUAL 7.2 ACTUAL 4.8  
PRED. 7.7 PRED 5.4  
DIFF. -0.5 DIFF -0.6  
2308-2324Z 360 DOWN RESTART WITH COLD IPL REQUIRED.CORE FRAG.D  
R 2824  
0331-0339Z 360/75B T/DOWN DUE 2260 DEVICE PROBLEMS-W/IPL DR 28  
24  
0402-0422Z CP FAULT AND 360 INTERFACE PROBLEMS DR 4527-4528

PASS 0229 JAN 14,1972 JAN 14,1972 DAY 014 014

DSS 41 A.O.S. 014/0427 L.O.S. 014/1300 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

0825-0832 360/75 DOWN- 2260 LOCKED OUT DUE TO OPERATOR DC ABEN  
DS DR 2830  
0521-1300 2W  
0521-1245 CMD. XMT.

PASS 0230 JAN 14,1972 JAN 14,1972 DAY 014 014

DSS 62 A.O.S. 014/1230 L.O.S. 014/1935 COMMANDS 238 RANGING NIL

DEVIATIONS OR ANOMALIES

SNOW STORM AT STATION  
2 WAY 1301-1921Z  
CMDS. 1302-1920Z

PASS 0230 JAN 14,1972 JAN 15,1972 DAY 014 015

DSS 12 A.O.S. 014/1912 L.O.S. 015/0504 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

1932-1934Z DIS DOWN FOR S/C ID CHANGE  
2001-2020Z 360/75B DOWN, CORE FRAGMENTATION. REF DR 2824  
0135Z-0142Z 360/75B-DOWN,CORE FRAGMENTATION. REF DR 2824  
0110Z DR T-1771 LOSS OF CMD LOOP LOCK  
2-W TK 1956-0504Z  
CMDS XMTD @ 1900-0425Z

PASS 0230 JAN 14,1972 JAN 15,1972 DAY 014 015

DSS 14 A.O.S. 014/1913 L.O.S. 015/0648 COMMANDS 00 RANGING NIL

DEVIATIONS OR ANOMALIES

2001-2020Z-360/75B DOWN DUE TO CONFIG.,REF DR#2824  
2255-2315Z-DIS LGWR BUFFER HUNG UP.NO DR  
0135-0144Z 360/75 DOWN FOR RESTART DR#2824

PASS 0230 JAN 15,1972 JAN 15,1972 DAY 015 015  
-----  
DSS 41 A.O.S. 015/0430 L.O.S. 015/1300 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0540-0543-TCP A RELOAD DUE TO ERRONEOUS CMD BLOKS  
0551-0554-SWITCHED TO TCP-B DUE TO CMD PROBLEMS ON "A"  
0634-0636-SWITCHED TO TCP-A DUE TO CMD PROBLEM  
2 WAY TRACK-0735Z-1300Z CMDS XMTD FR 0748Z TO 1245Z

PASS 0231 JAN 15,1972 JAN 15,1972 DAY 015 015  
-----  
DSS 62 A.O.S. 015/1230 L.O.S. 015/1930 COMMANDS 180 RANGING NIL

DEVIATIONS OR ANOMALIES

1323-1939Z 360/758 DOWN LOCKED OUT OF SYST WARM IPL, RESTART  
DR 2839

PASS 0231 JAN 15,1972 JAN 16,1972 DAY 015 016  
-----  
DSS 12 A.O.S. 015/1909 L.O.S. 016/0600 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2-W TK 1952Z-0600Z  
CMDS XMTD @ 2151Z-0526Z

PASS 0231 JAN 15,1972 JAN 16,1972 DAY 015 016  
-----  
DSS 14 A.O.S. 015/1910 L.O.S. 016/0643 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TELEM TCP 8.1KSNR. TCP 16.2KSNR  
ACTUAL 6.8 ACTUAL 4.0  
PREDICTED 7.3 PREDICTED 4.8  
DIFF-0.5 DIFF-0.8  
1945-LGWR NOT UP DATING- DIS HUNG-UP  
1920Z-DIS RESTART  
1957-1958Z-DIS RELOAD  
2J01-DIS LGWR NOT INCRAMENTING  
2228Z-LOS-DIS LGWR NOT INCRAMENTING- NO STATION UNTIL AFTER TR  
ACK

PASS 0231 JAN 16,1972 JAN 16,1972 DAY 016 016  
-----  
DSS 41 A.O.S. 016/0524 L.O.S. 016/1300 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0530Z-TCP-A RELOAD DUE TO CMD BLOCKS HANG-UP  
0830Z-0905Z- 360/75 DOWN- TRK DATA NOT PROCESSING, CMD SDR NOT  
LOGGING,CANCL R/T JOB, COLD RESTART-DR 2844  
0925Z-0933Z-360/75 DOWN-COMPUTER TIME 2 MINUS SLOW, NEG. RESPO  
NCE FROM MED. ENTRIES, COLD IPL, COLD RESTART DR 2844  
1033Z-1045Z- 360/75 DOWN-NAT TRK WABLE TO ACCESS 360, SWAPPING  
ALL DISC PACKS EXCEPT MSD, COLD IPL, COLD RESTART DR 2844  
2 WAY TRACK-0600Z-1300Z  
CMDS XMTD @-0612Z-1245Z

PASS 0232 JAN 16,1972 JAN 16,1972 DAY 016 016  
-----  
DSS 62 A.O.S. 016/1230 L.O.S. 016/1930 COMMANDS 150 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0232 JAN 16,1972 JAN 17,1972 DAY 016 017  
-----  
DSS 12 A.O.S. 016/1908 L.O.S. 017/0240 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

2121-2206Z 360/75A DOWN-HARDWARE PROBLEM, WARM IPL, SWITCHED TO  
0 "B" STRING DR 2845  
0118-0124Z 360/75B DOWN-STRING SWAP"A", WARM IPL NO DR  
0238- LOS 360/75 DOWN FOR IPL  
2 WAY TK 1952-0230Z  
CMDS XMTD @ 2311-0000Z

PASS 0232 JAN 16,1972 JAN 17,1972 DAY 016 017  
-----  
DSS 14 A.O.S. 016/1909 L.O.S. 017/0423 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TELEM TCP 8.1KSNR                   TCP 16.2KSNR  
ACTUAL 7.7                           ACTUAL 3.5  
PREDICTED 8.2                       PREDICTED 4.4  
DIFFERENCE-0.5                      DIFFERENCE-0.9  
2121-2206Z 360/75 DOWN HARDWARE PROBLEM/ WARM IPL SWITCHED TO  
"B" DR 2845

PASS 0232 JAN 17,1972 JAN 17,1972 DAY 017 017  
-----  
DSS 42 A.O.S. 017/0218 L.O.S. 017/1231 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

0329Z-0340Z-CMD ALARM 4/00-0000, REASON UNKNOWN, RELOAD TCP-A,  
DR T-1733  
0643Z-0703Z-LOSS OF DATA, UNABLE TO ACCESS TCP-A, RELOADED, DR  
T-1744  
2 WAY TRACK-0230Z-120Z  
CMDS XMTD @-0241Z-1220Z

PASS 0233 JAN 17,1972 JAN 17,1972 DAY 017 017  
-----  
DSS 62 A.O.S. 017/1200 L.O.S. 017/1925 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

1850-1831Z LOST HSD DR4553  
1847-1851Z LOST HSD DR4553  
CMD 1234-1910Z  
2 WAY 1233-1915Z

PASS 0233 JAN 17,1972 JAN 18,1972 DAY 017 018  
-----  
DSS 12 A.O.S. 017/1904 L.O.S. 018/0445 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

0012-0021Z -360/75A DOWN FOR IPL, COLD ON WARM; DUE TO RECONFIG OF DEVICES IN RECON AREA DR 2850

PASS 0233 JAN 17,1972 JAN 18,1972 DAY 017 018  
-----  
DSS 14 A.O.S. 017/1906 L.O.S. 018/0640 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1905Z TCP "A" DOWN FOR DEVELOPMENT- TCP"B" PROCESS ON 16.2 ONLY  
0012Z-0021Z- 360/75A DOWN FOR TCP, COLD ON WARM DUE TO RECONFIG OF DEVICES IN RECON AREA DR 2850  
POST TRACK- 0237Z-0239Z-WB-1 GETTING HITS, FAILURE OF CHANNEL SELECT UNIT IN MICROWAVE UNIT, SWITCHED TO WB-2 DR NBR-4556, T FR NO-8-04331

PASS 0233 JAN 18,1972 JAN 18,1972 DAY 018 018  
-----  
DSS 41 A.O.S. 018/0411 L.O.S. 018/1320 COMMANDS 20 RANGING NIL

DEVIATIONS OR ANOMALIES

1246Z-1300Z- 360/75A DOWN FOR SCHED. SWAP TO MODE 5, VER 21-3, NO DR.  
2 WAY TRACK-0445Z-1320Z  
CMDS XMTD @- 0456Z-0852Z 0935Z-1305Z

PASS 0234 JAN 18,1972 JAN 18,1972 DAY 018 018  
-----  
DSS 62 A.O.S. 018/1230 L.O.S. 018/1935 COMMANDS 207 RANGING NIL

DEVIATIONS OR ANOMALIES

1657-1701Z - LOST DTV; 3100 DOWN DR 2161  
1702-1706Z - LOST DTV; 3100 DOWN DR 2161  
1731-1739Z 360 DOWN REF DR 2855  
1742-1752Z 360 DCWN; COLD IPL WARM RESTART I/O ERROR ON LSD PAC DR 2855  
1826-1852Z 360 DOWN; COLD IPL- HARDWARE PROBLEM DR 2856  
2-W TK 1342Z-1935Z  
CMDS XMTD @ 1529Z-1921Z

PASS 0234 JAN 18,1972 JAN 18,1972 DAY 018 018  
-----  
DSS 51 A.O.S. 018/1355 L.O.S. 018/1800 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS 1354Z- DATA ON LINE @ 1404Z  
1657-1701Z LOST DTV; 3100 DOWN DR 2161  
1702-1706Z LOST DTV; 3100 DOWN  
1742-1752Z 360 DOWN COLD IPL WARM RESTART I/O ERROR ON LSD PRO. DR 2855  
3 WAY TRACK

PASS 0234 JAN 18,1972 JAN 19,1972 DAY 018 019

DSS 12 A.O.S. 018/1902 L.O.S. 019/0630 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

\*TRACK EXTENDED (2-W TK 1957-0630Z) (CMD XMTD @ 2145-0519)  
AOS-1902Z DIS LGWR/LGER/BLRG/HSP TIME INCORRECT EVERY OTHER BS  
N UPDATE  
1941-1943Z REINITIALIZE DIS; DID NOT CAUSE PROBLEM, SUSPECT 36  
0 SOFTWARE DR 0003  
1858-1907Z 360 DOWN, HARDWARE, IPL DR 2856  
2054-2103Z 360 DOWN, COLD IPL, DUMP AND RESTART NAT TRACK UNA-  
BLE TO ACCESS MID PACK, DISPLAY OR UNITE SDR. DR 2858  
2240-2255Z 360 DOWN; 2260 LOCKOUT DR 2861 0113-0118Z 360 DOWN  
-LOCKOUT; RESTART DR 2865

PASS 0234 JAN 18,1972 JAN 19,1972 DAY 018 019

DSS 14 A.O.S. 018/1903 L.O.S. 019/0640 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP 8.1KSNR	TCP 16.2KSNR
ACTUAL 6.6 -	3.9
PRED. 7.3	4.8
DIFF. -0.7	-0.9

1858-1907Z 360 DOWN; HARDWARE PROBLEM; IPL DR 2856  
2054-2103Z 360 DOWN; COLD IPL, DUMP RESTART DR 2858  
2240-2255Z 360 DOWN, 2260 LOCKED OUT DR 2861  
0113-0118Z 360 DOWN, LOCKED OUT, RESTART DR 2865  
NATTEL DR T-53, N-J004. 360/75A MODEL 5 TLM PROCESS ALARMS  
3 WAY TRACK - NO CMDS.

PASS 0234 JAN 19,1972 JAN 19,1972 DAY 019 019

DSS 41 A.O.S. 019/0559 L.O.S. 019/1320 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK-0630Z-1320Z  
CMDS XMTD @-0932Z-1315Z

PASS 0235 JAN 19,1972 JAN 19,1972 DAY 019 019

DSS 62 A.O.S. 019/1230 L.O.S. 019/1920 COMMANDS 233 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 1342Z TO 1920 CMD XMIT: 1410Z TO 1841Z  
1351-1403, 360/75 DOWN-LOCKED OUT OF SYSTEM, WARM IPL- WARM RES-  
TART, DR 2855  
1425-1458Z 360 DOWN-SCHED SWAP FROM MOD V- NO DR  
1508-1517Z 360 DOWN-RTS POD LOAD PROB, WARM RESTART  
1749-1751Z HSD DOWN-BETWEEN GODDARD AND MADRID, DR 4578, CC AN-  
D S UP TO DATE DELAYED  
1647-1920Z MISSING PSEUDO/RESIDUALS

PASS 0235 JAN 19,1972 JAN 20,1972 DAY 019 020  
-----  
DSS 12 A.O.S. 019/1900 L.O.S. 020/0300 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

1957-2001Z 3100 DOWN, CHANNEL HUNG UP, DR 2861  
2157-2205Z RELOADED TCP- CMD PORTION AT DSS 12, RELOAD REQD.  
0300Z DSS 12 LOS  
1942Z-0230 2 WAY  
1942-0215Z CMDS XMITTED

PASS 0235 JAN 19,1972 JAN 20,1972 DAY 019 020  
-----  
DSS 14 A.O.S. 019/1902 L.O.S. 020/0417 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1957-2001,3100 DOWN CHANNEL HANG UP DR 2861  
0120- LOSS MONITOR DATA FROM DSS 14. DIS WAS TAKEN FOR VLBI  
C- VLBI TEST-NO VALID TRACKING DATA

PASS 0235 JAN 20,1972 JAN 20,1972 DAY 020 020  
-----  
DSS 42 A.O.S. 020/0218 L.O.S. 020/1230 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

DR 0011 DOWNLINK EXCEEDED ALLOWABLE TOLERANCE  
POST TRACK- DR T-1782, TFR 51153 LOW SNR AND INTERMITTENT LOSS  
OF DATA FROM 050756Z TO 053334Z DUE TO SDA1 ISO-AMP FAILURE.

PASS 0236 JAN 20,1972 JAN 20,1972 DAY 020 020  
-----  
DSS 62 A.O.S. 020/1200 L.O.S. 020/1920 COMMANDS 170 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 1232 TO 1920Z, CMD XMIT 1531 TO 1839Z

PASS 0236 JAN 20,1972 JAN 21,1972 DAY 020 021  
-----  
DSS 12 A.O.S. 020/1858 L.O.S. 021/0245 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0236 JAN 20,1972 JAN 21,1972 DAY 020 021  
-----  
DSS 14 A.O.S. 020/1900 L.O.S. 021/0639 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B-SCI-SNR  
ACTUAL-4.2  
PREDIC-5.2  
DIFFER- -1.0

PASS 0236 JAN 21,1972 JAN 21,1972 DAY 021 021  
-----  
DSS 41 A.O.S. 021/0214 L.O.S. 021/1310 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0311Z-0325Z-360/75 DOWN FOR IPL,WARM START  
OPR SWITCHED DRIVE OFF INSTEAD OF RNG MOD OFF AT 0955Z DOWNLIN  
K GLITCHED FOR 12 SECS S/C REMAINED 2 WAY DR 41/032 T-1785  
D/L AND ENG SNR EXCEEDED ALLOWABLE LEVELS DR N-0015  
2 WAY TRACK 0955Z-1300Z  
CMDS XMTD 0322Z-0955Z 1008Z-1245Z  
1046Z HSD STREAM NO 1 FAILED,SWITCH TO BACKUP

PASS 0237 JAN 21,1972 JAN 21,1972 DAY 021 021  
-----  
DSS 62 A.O.S. 021/1230 L.O.S. 021/1915 COMMANDS 341 RANGING NIL

DEVIATIONS OR ANOMALIES

1855-1903Z 360/75A DOWN; DOA HANG-UPS RESTART REQ DR 2830  
2-W TK 1322Z-1915Z CMDS XMTD 1429Z-1842Z

PASS 0237 JAN 21,1972 JAN 22,1972 DAY 021 022  
-----  
DSS 12 A.O.S. 021/1855 L.O.S. 022/0530 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

0532Z DSS 12 LOS  
1937Z-0530 2 W  
1937Z-0525 CMD XMITTED

PASS 0237 JAN 21,1972 JAN 22,1972 DAY 021 022  
-----  
DSS 14 A.O.S. 021/1858 L.O.S. 022/0639 COMMANDS N/A RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B-SCISNR  
ACTUAL- 4.4  
PREDIC- 5.2  
DIFFER -0.8

PASS 0237 JAN 22,1972 JAN 22,1972 DAY 022 022  
-----  
DSS 41 A.O.S. 022/0541 L.O.S. 022/1300 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

CHAR BIAS AND NOISE N/A DUE TO RFS FREE RUN TEST  
0603-0613Z HSLL DOWN-GSFC PROBLEM  
0801-0812Z 360 DOWN-STRING SWAP. A TO B SYST SCHEDULED  
1117-1124Z HSLL DOWN  
1135Z-DSN FMTS(DTV) NOT UPDATING HSLL PROBLEM  
1754Z-1210Z 360 DOWN COLD RESTART DR 2890

PASS 0238 JAN 22,1972 JAN 22,1972 DAY 022 022

DSS 62 A.O.S. 022/1243 L.O.S. 022/1900 COMMANDS 394 RANGING NIL

DEVIATIONS OR ANOMALIES

SWITCHED TO TCPB 1814Z TO CHECK OUT HSD SYNCRONIZE 2 TCPB ENG  
BAD SWITCHED BACK TO TCPA 1842Z UNABLE TO VALIDATE HSD SYNCRON  
IZER 2 THIS WAS DONE AT PROJECT'S REQUEST  
1804Z-3100Z STOPPED UPDATE  
1818Z-1824Z 360/75 DOWN FOR JOB RESTART DR 2848  
1826Z-1833Z 360/75 DOWN LOCKED OUT OF SYSTEM COLD IPL/WARM RES  
TART DR 2848  
2-WAY TRK 1343-1855Z CMDS XMTD 1405-1837Z

PASS 0238 JAN 22,1972 JAN 23,1972 DAY 022 023

DSS 12 A.O.S. 022/1851 L.O.S. 023/0630 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2257Z-2303Z 360/75 DOWN  
0608Z-0625Z 360 DOWN IPL WARM RESTART DR 2899  
2 WAY TRK CMD

PASS 0238 JAN 22,1972 JAN 23,1972 DAY 022 023

DSS 14 A.O.S. 022/1855 L.O.S. 023/0638 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCPB-SCISNR TCPB-SCI  
ACTUAL-7.5 ACTUAL-8.0  
PREDIC-7.7 PREDIC-8.4  
DIFFER- -0.2 DIFFER- -0.4  
2257Z-2303Z 360 DOWN  
0608Z-0675Z 360 DOWN IPL WARM RESTART DR 2899

PASS 0238 JAN 23,1972 JAN 23,1972 DAY 023 023

DSS 41 A.O.S. 023/0554 L.O.S. 023/1320 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

0608-0625Z 360 DOWN IPL WARM RESTART DR 2899  
0733-0742Z 360 DOWN FOR SCHEDULED STRING SWAP  
2 WAY 0630-1320Z  
CMD 0641-1305Z

PASS 0239 JAN 23,1972 JAN 23,1972 DAY 023 023

DSS 62 A.O.S. 023/1230 L.O.S. 023/1915 COMMANDS 276 RANGING NIL

DEVIATIONS OR ANOMALIES

2-W TRK 1343Z-1915Z  
CMDS XMTD 1430-1701Z

PASS 0239 JAN 23,1972 JAN 24,1972 DAY 023 024  
-----  
DSS 12 A.O.S. 023/1851 L.O.S. 024/0500 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

DIS RELOADED AT AOS DUE LGWR NOT LOGGING

PASS 0239 JAN 23,1972 JAN 24,1972 DAY 023 024  
-----  
DSS 14 A.O.S. 023/1853 L.O.S. 024/0637 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

ACTUAL- 7.7  
PREDIC- 8.2  
DIFFER- -.8  
2-WAY TRK 0450Z-0625Z

PASS 0239 JAN 24,1972 JAN 24,1972 DAY 024 024  
-----  
DSS 41 A.O.S. 024/0559 L.O.S. 024/1315 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0713-0719Z 360 DOWN IPL WARM RESTART  
0848-0902Z 360 DOWN IPL WARM RESTART DR 2900  
0931-0937Z 360 DOWN COLD IPL COLD RESTART 2901  
1237-1250Z 360 DOWN COLD IPL COLD RESTART 2902  
2 WAY 0630-1305Z  
CMD 0641-1300Z

PASS 0240 JAN 24,1972 JAN 24,1972 DAY 024 024  
-----  
DSS 62 A.O.S. 024/1230 L.O.S. 024/1945 COMMANDS 231 RANGING NIL

DEVIATIONS OR ANOMALIES

TCPA-SCISNR  
ACTUAL- 4.1  
PREDIC- 5.7  
DIFFER- -1.6  
1237Z-1250Z 360/75 DOWN COLD IPL COLD RESTART DR 2902  
2 WAY TRK 1328Z-1825Z CMDS XMITTED 1223Z-1828Z

PASS 0240 JAN 24,1972 JAN 25,1972 DAY 024 025  
-----  
DSS 12 A.O.S. 024/1847 L.O.S. 025/0305 COMMANDS 20 RANGING NIL

DEVIATIONS OR ANOMALIES

1840Z-1908Z GOULD A800 H/C OFF-LINE FOR MAINT  
2209Z-2216Z 360/75 DOWN DUE TO TLM PROCESS HANG-UP DR 2906  
0206Z DSS 12 LOS

PASS 0240 JAN 24,1972 JAN 25,1972 DAY 024 025

DSS 14 A.O.S. 024/2024 L.O.S. 025/0446 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCPB-SCISNR  
ACTUAL 7.9  
PREDIC 8.4  
DIFFER -0.5  
1840-1408Z GOULD 4800 H/C OFF-LINE FOR MAINT  
LATE AOS DUE TO ANTENNA PROBLEMS DR T-1791  
2209-2216Z 360/75 DOWN DUE TO TLM PROCESS HUNG-UP RESTART  
DR2906  
0120 DIS SCHEDULED DOWN FOR DSIF VLBI

PASS 0240 JAN 25,1972 JAN 25,1972 DAY 025 025

DSS 42 A.O.S. 025/0207 L.O.S. 025/1219 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

TCPB-ENG SNR  
ACTUAL- 5.6  
PREDIC- 6.2  
DIFFER- -.6  
0623-0628Z 360/75 DOWN SCH RESTART NO DR  
NO DIS

PASS 0241 JAN 25,1972 JAN 25,1972 DAY 025 025

DSS 62 A.O.S. 025/1130 L.O.S. 025/1905 COMMANDS 214 RANGING NIL

DEVIATIONS OR ANOMALIES

1333Z-1339Z-360/75 DOWN, SKED, COLD IPL/WARM RESTART NO DR  
2-W TK 1233Z-1905Z  
CMDS XMTD 1429Z-1631Z

PASS 0241 JAN 25,1972 JAN 26,1972 DAY 025 026

DSS 12 A.O.S. 025/1845 L.O.S. 026/0500 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

0257Z TCP A RELOAD DUE TO ODR RUN AWAY

PASS 0241 JAN 25,1972 JAN 26,1972 DAY 025 026

DSS 14 A.O.S. 025/1849 L.O.S. 026/0636 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

TCPB-SCI SNR      TCPB-SCI SNR  
ACTUAL- 4.7      ACTUAL- 3.3  
PREDIC- 5.4      PREDIC- 3.8  
DIFFER- -.7      DIFFER- -.5  
0514Z-0636Z 2 WAY 0514Z-0630Z CMDS XMITTED

PASS 0241 JAN 26,1972 JAN 26,1972 DAY 026 026  
-----  
DSS 41 A.O.S. 026/0553 L.O.S. 026/1315 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

BIAS AND NOISE N/A DUE TO RFS TEST

PASS 0242 JAN 26,1972 JAN 26,1972 DAY 026 026  
-----  
DSS 62 A.O.S. 026/1230 L.O.S. 026/1925 COMMANDS 196 RANGING NIL

DEVIATIONS OR ANOMALIES

1251-1300Z 360 DOWN COLD IPL WARM RESTART  
2-W TK 1328-1925Z  
CMDS XMTD 1430-1915Z

PASS 0242 JAN 26,1972 JAN 26,1972 DAY 026 026  
-----  
DSS 51 A.O.S. 026/1354 L.O.S. 026/1800 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

3-WAY PASS WITH DSS-62

PASS 0242 JAN 26,1972 JAN 27,1972 DAY 026 027  
-----  
DSS 12 A.O.S. 026/1843 L.O.S. 027/0420 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

EARLY LOS TO ALLOW MORE RANGING TIME AT DSS-14 EARLY 2 WAY  
XFER  
1945Z-2004Z 360/75 DOWN SCHED SYSTEM SWAP NO DR  
2026Z-2030Z CDC 3100 DOWN RESTART REQ DR 2761  
0147Z-0158Z 360/75 DOWN 1052'S LOCKED OUT WARM IPL RESTART  
REQ DR 2761  
0147Z-0158Z 360/75 DOWN-1052'S LOCKED OUT WARM IPL RESTART  
DR 2925  
2 WAY TRACK 1925Z-0420Z CMDS XMTD 1936Z-0415Z

PASS 0242 JAN 26,1972 JAN 27,1972 DAY 026 027  
-----  
DSS 14 A.O.S. 026/1846 L.O.S. 027/0634 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

TCPA-ENG SNR	TCPA-ENG SNR	TCPB-SCI SNR	TCPB-SCI SNR
ACTUAL-11.2	ACTUAL- 9.2	ACTUAL- 7.8	ACTUAL- 5.4
PREDIC-11.7	PREDIC- 9.4	PREDIC- 8.2	PREDIC- 5.9
DIFFER- -.5	DIFFER- -.2	DIFFER- -.4	DIFFER- -.5
2003Z-APS DRIVE GLITH REF T-1799			
1945Z-2004Z 360/75 DOWN FOR SCHED SYSTEM SWAP NO DR			
2026Z-2030Z CDC 3100 DOWN RESTART REQ DR 2761			
0147Z-0158Z 360/75 1052'S LOCKED OUT WARM IPL RESTART DR 2925			
0217Z-0219Z LOST HSD BAD SYNC AT 360/75			
2 WAY TRACK 0420Z-0630Z			
CMDS XMTD 0421Z-0625Z			

PASS 0242 JAN 27,1972 JAN 27,1972 DAY 027 027  
-----  
DSS 41 A.O.S. 027/0600 L.O.S. 027/1315 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

0610Z TCPA CMD CONFRIM PROBLEM-RELOAD REQ NO DR  
0747Z DIS RELOAD UNABLE TO REVIEW ON LINE PRINTER AND MAG  
PACK NO DR  
0852Z-0904Z 360 DOWN CANCELLED R.T. JOB STEP NO DR  
0848Z-0914Z HSD DOWN STATION TO CANBERRA LINE WAS SWITCHED  
TO BACK UP DR 4641  
2 WAY 0630-1305Z

PASS 0243 JAN 27,1972 JAN 27,1972 DAY 027 027  
-----  
DSS 62 A.O.S. 027/1242 L.O.S. 027/1940 COMMANDS 191 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1328Z-1940Z  
CMDS XMIT 1430Z-1926Z  
NO DIXFER TEST STATION NOT READY  
1242 AOS STATION 12 MIN LATE AS PER TRACK CHF NO DR  
1855-1902Z 3100 DOWN RESTART REQ NO DR  
1910-1936Z 360 DOWN IPL REQ ALL DEVICES LOCKED OUT NO DR

PASS 0243 JAN 27,1972 JAN 28,1972 DAY 027 028  
-----  
DSS 12 A.O.S. 027/1842 L.O.S. 028/0430 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 1AGC  
ACTUAL 153.7  
PREDIC 153.0  
DIFFER -0.7  
EARLY LOS 2 WAY XFER TO ALLOW MORE RANGING TIME AT DSS 14  
1855Z-1902Z 3100 DOWN RESTART REQ NO DR  
1910Z-1916Z 360 DOWN IPL REQ ALL DEVICES LOCKED OUT NO DR  
2215Z-0022Z LOST ODR LOG WRITE CAPABILITY RELOAD REQ DELAYED  
DUE CMDING ACTIVITY, TCP-A RELOADED 0026Z REF DR T 1800  
POST TRACK TCP TAPE DATA LOST, MAG TAPE UNIT TRANS ORT FAILURE,  
PROGRAM RELOAD, TFR B04416 DR T-1800  
2 WAY TRACK 1940Z-0421Z  
CMDS XMTD 1951Z-0415Z

PASS 0243 JAN 27,1972 JAN 28,1972 DAY 027 028  
-----  
DSS 14 A.O.S. 027/1844 L.O.S. 028/0634 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 146.2	ACTUAL 7.5	ACTUAL 6.9
PREDIC 145.2	PREDIC 7.8	PREDIC 7.3
DIFFER -0.4	DIFFER -0.3	DIFFER -1.1

TCP-B-SCI SNR	TCP-B-SCI SNR
ACTUAL 4.4	ACTUAL 3.4
PREDIC 5.1	PREDIC 4.3
DIFFER -0.7	DIFFER 136.2

1855-1902Z 3100 DOWN RESTART REQ NO DR  
1910-1916Z 360 DOWN IPL REQ ALL DEVICES LOCKED OUT NO DR  
0415-0420Z SMT DUPLEX WG SW HUNG UP. RECYCLED SW BY PWR  
REMOVAL DR 1801. 2-WAY TRACK 0421-0625Z CMDS XMTD 0422-0620Z

PASS 0243 JAN 28,1972 JAN 28,1972 DAY 028 028  
-----  
DSS 41 A.O.S. 028/0600 L.O.S. 028/1315 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0752Z-0758Z 360 DOWN CMD SDR LOG PROB IPL RESTART DR 2902  
J815Z-0822Z 360 DOWN CMD SDR LOG PROB COLD IPL COLD RESTART  
DR 2902  
1252Z-1312Z 360 DOWN CONTINOUS DOA ADMINS  
2 WAY 0635Z-1305Z  
CMDS 0640-1300Z

PASS 0244 JAN 28,1972 JAN 28,1972 DAY 028 028  
-----  
DSS 62 A.O.S. 028/1230 L.O.S. 028/1930 COMMANDS 192 RANGING NIL

DEVIATIONS OR ANOMALIES

1329Z-1930Z 2 WAY  
1252Z-1312Z 360 DOWN WARM IPL-WARM REAL TIME RELOAD DR 2934  
1655Z-1657Z LOST HSD FROM DSS 62  
1745Z-1758Z 360/75 DOWN COLD IPL  
1838Z-1854Z 360/75 DOWN COLD IPL-WARM START  
GOULD 4800 DOWN FOR ENTIRE PASS. TROUBLE CAN BE SEEN BY LOOK-  
ING AT DTV HARD COPY

PASS 0244 JAN 28,1972 JAN 29,1972 DAY 028 029  
-----  
DSS 14 A.O.S. 028/1841 L.O.S. 029/0633 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 1,2AGC	TCP-A-ENG SNR	TCP-B-SCI SNR	TCP-B-SCI SNR
ACTUAL 145.9	ACTUAL 10.6	ACTUAL 7.6	ACTUAL 4.2
PREDIC 144.9	PREDIC 10.6	PREDIC 7.2	PREDIC 4.8
DIFFER -1.0	DIFFER 0	DIFFER +0.4	DIFFER -0.6

TCP-B-SCI SNR  
PREDIC 7.2  
DIFFER 0  
1838Z-1854Z 360/75 DOWN, COLD IPL, WARM RESTART  
2011Z-2017Z 360/75 DOWN, IPL, COLD RESTART DR C-096  
0610Z-0618Z TCP-B PROGRAM HALT, RELOAD REQ REF DR T-1804  
2139Z BIT RATE CHANGE ENTERED IN ERROR BY SOD REF DR T-1802  
3/1 WAY TRACK, NO CMDS

PASS 0244 JAN 28,1972 JAN 29,1972 DAY 028 029  
-----  
DSS 12 A.O.S. 028/1844 L.O.S. 029/0500 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

1838-1854Z 360/75 DOWN COLD IPL WARM RESTART  
2011-2017Z 360/75 DOWN COLD RESTART DR C-096  
2-WAY TRACK 1930-0500Z CMNDS XMTD AT 1940-0435Z

PASS 0244 JAN 29,1972 JAN 29,1972 DAY 029 029  
-----  
DSS 41 A.O.S. 029/0554 L.O.S. 029/1315 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0608Z CMD VERIFICATION PROB. TCP-A RELOAD NO DR  
1300Z LDS 360/75 DOWN, HARDWARE PROB. STRING SWAP  
MOST OF PASS TRACKING MODE WAS 1-WAY

PASS 0245 JAN 29,1972 JAN 29,1972 DAY 029 029  
-----  
DSS 62 A.O.S. 029/1208 L.O.S. 029/1930 COMMANDS 188 RANGING NIL

DEVIATIONS OR ANOMALIES

1300Z-1328Z 360/75 DOWN, HARDWARE PROB. STRING SWAP  
1619Z-1626Z 360/75 DOWN-OUTPUT HUNG UP NO DR  
1800Z-1804Z 360/75 DOWN-RESTART DR 2333

PASS 0245 JAN 29,1972 JAN 30,1972 DAY 029 030  
-----  
DSS 12 A.O.S. 029/1839 L.O.S. 030/0500 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 1 AGC  
ACTUAL 153.1  
PREDIC 1 3.0  
DIFFER -0.1  
2 WAY 1954Z-0500Z CMDS XMIT 2242Z TO 0350Z 2229Z-2235Z  
360/75 DOWN, COLD IPL-COLD RESTART DR 2902

PASS 0245 JAN 29,1972 JAN 30,1972 DAY 029 030  
-----  
DSS 14 A.O.S. 029/1840 L.O.S. 030/0633 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2AGC	RX 1,2AGC	TCPA-ENG SNR	TCPA-ENG SNR
ACTUAL 146.0	ACTUAL 145.2	ACTUAL 7.3	ACTUAL 10.7
PREDIC 146.0	PREDIC 144.9	PREDIC 7.4	PREDIC 11.7
DIFFER 0	DIFFER -0.3	DIFFER -0.1	DIFFER -1.0
TCPB-SCI SNR		TCPB-SCI SNR	TCPB-SCI SNR
ACTUAL 3.7	ACTUAL 6.9	ACTUAL 3.2	ACTUAL 7.9
PREDIC 4.7	PREDIC 8.1	PREDIC 3.9	PREDIC 8.5
DIFFER -1.0	DIFFER -1.2	DIFFER -0.7	DIFFER -0.4

2 WAY 0450Z-0620Z  
CMDS XMIT 0505Z AND 0615Z  
UNABLE TO PERFORM DATA XFER DUE TO SCA PROBS DR 1805  
2229Z-2235Z 360 DOWN COLD IPL AND COLD START DR 2905

PASS 0245 JAN 30,1972 JAN 30,1972 DAY 030 030  
-----  
DSS 41 A.O.S. 030/0556 L.O.S. 030/1315 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

26 MIN LATE ACQ UNKNOWN  
2 WAY TK 0644Z-1305Z  
CMDS XMTD 1033Z-1217Z

PASS 0246 JAN 30,1972 JAN 30,1972 DAY 030 030

DSS 62 A.O.S. 030/1230 L.O.S. 030/1930 COMMANDS 173 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS-LOS NO DIS; DUE TO SKIP FUNCTION FAIL UNABLE TO LOAD MONITOR PROGRAM REF. TFR 02359 DR T1806

PASS 0246 JAN 30,1972 JAN 31,1972 DAY 030 031

DSS 12 A.O.S. 030/1837 L.O.S. 031/0500 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

ERRONEOUS DIS LGWR, LGER AND BLRC READINGS ON DIS ONCE EVERY MINUTE DR N-0042  
2233Z CMDING PROBLEMS TCP-A RELOAD REQ REF DR T-1808  
0133Z DIS RELOADED REF DR N-0042  
1900Z TDH EXC VCO FIELD INTERMITTENTLY STOWS ZERO'S IN 4 MOST SIG. DIGITS DR T-1807  
2 WAY TRACK 1930Z-0420Z  
CMDS XMTD 1945Z-0415Z

PASS 0246 JAN 30,1972 JAN 31,1972 DAY 030 031

DSS 14 A.O.S. 030/1838 L.O.S. 031/0632 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

TCP-B-SCI SNR  
ACTUAL 7.5  
PREDIC 8.1  
DIFFER +0.2  
0209Z DIS MONITOR PROGRAM RELOADED NO DR  
2 WAY TRACK 0420Z-0625Z CMDS XMTD 0425Z-0610Z

PASS 0246 JAN 31,1972 JAN 31,1972 DAY 031 031

DSS 41 A.O.S. 031/0551 L.O.S. 031/1305 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

0722Z-J724Z LOST HYDROLYCS ON APS, SWAPPED TO BACK UP SYSTEM DR T-1809  
2 WAY TRACK 0649Z-0721Z 0803Z-1305Z  
CMDS XMTD 0813Z-1152Z

PASS 0247 JAN 31,1972 JAN 31,1972 DAY 031 031

DSS 62 A.O.S. 031/1231 L.O.S. 031/2030 COMMANDS 204 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1305 TO 2030  
CMD XMIT 1430 TO 1900  
2010Z-2023Z, 3100Z DCWN, CIC HANG UP THROUGH 360/75 INTERFACE DR 2959

PASS 0247 JAN 31,1972 JAN 31,1972 DAY 031 031  
-----  
DSS 51 A.O.S. 031/1355 L.O.S. 031/1500 COMMANDS 0 RANGING NIL  
  
DEVIATIONS OR ANOMALIES  
  
2 WAY TRACK UNAVAILABLE

PASS 0247 JAN 31,1972 FEB 01,1972 DAY 031 032  
-----  
DSS 14 A.O.S. 031/1835 L.O.S. 032/0631 COMMANDS 2 RANGING MU  
  
DEVIATIONS OR ANOMALIES  
  
TCP-B-SCI  
ACTUAL 4.0  
PREDIC 4.6  
DIFFER -0.6  
0150Z-0159Z 360/75 DOWN-LOCKED OUT, WARM IPL AND RESTART DR-  
2962  
2 WAY TRACK 0420Z-0625Z  
CMDS XMTD 0425Z-0610Z

PASS 0247 JAN 31,1972 FEB 01,1972 DAY 031 032  
-----  
DSS 12 A.O.S. 031/2000 L.O.S. 032/0430 COMMANDS 8 RANGING NIL  
  
DEVIATIONS OR ANOMALIES  
  
0150Z-0159Z 360/75 DOWN-LOCKED OUT, WARM IPL, RESTART DR 2962  
2 WAY TRACK 2030Z-0420Z  
CMDS XMTD 2040Z-0415Z

PASS 0247 FEB 01,1972 FEB 01,1972 DAY 032 032  
-----  
DSS 41 A.O.S. 032/0551 L.O.S. 032/1305 COMMANDS 15 RANGING NIL  
  
DEVIATIONS OR ANOMALIES  
  
1017Z-1025Z 360/75 DOWN, DUE TO TLM PROCESS PROBLEMS; RESTART  
DR 2964  
1244Z-1255Z 360/75 DOWN, FOR VERSION CHANGE TO 24.2 NO DR  
2 WAY TRACK 0649Z-1305Z  
CMDS XMITED 0857Z-1209Z

PASS 0247 FEB 01,1972 FEB 01,1972 DAY 032 032  
-----  
DSS 42 A.O.S. 032/0859 L.O.S. 032/1100 COMMANDS 0 RANGING NIL  
  
DEVIATIONS OR ANOMALIES  
  
1017Z-1025Z 360/75 DOWN, DUE TO TLM PROCESS NOT PROCESSING  
RESTART NO DR

PASS 0248 FEB 01,1972 FEB 01,1972 DAY 032 032  
-----  
DSS 62 A.O.S. 032/1230 L.O.S. 032/2030 COMMANDS 231 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1329Z-2030Z  
CMD XMIT 1429Z-1909Z  
1328Z-1331Z DIS DOWN, RELOAD DUE TO BLOWN FUSE TFR-B02365

PASS 0248 FEB 01,1972 FEB 02,1972 DAY 032 033  
-----  
DSS 14 A.O.S. 032/1833 L.O.S. 033/0630 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

TCP-B-SCI SNR  
ACTUAL 4.0  
PREDIC 4.7  
DIFFER .7  
2 WAY TRACK 0420Z-0625Z  
CMDS XMTD 0425Z-0610Z

PASS 0248 FEB 01,1972 FEB 02,1972 DAY 032 033  
-----  
DSS 12 A.O.S. 032/2300 L.O.S. 033/0430 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0044Z-0129Z 360 DOWN-LOCKED OUT, WARM IPL AND RESTART, FAIL-  
ED, RE-IPL DR 2969  
210517Z-211200Z TXR FAILURE (KLYSTRON-FAILURE) DR T-1810  
TFR B04426  
2 WAY TRACK 2030Z-0420Z  
CMDS XMTD 2041Z-0415Z

PASS 0248 FEB 02,1972 FEB 02,1972 DAY 033 033  
-----  
DSS 41 A.O.S. 033/0559 L.O.S. 033/1300 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

0707Z-0718Z 360/75 DOWN LOCKED OUT, WARM IPL AND RESTART  
DR 2969  
1235Z-1246Z 360/75 DOWN,LOCKED OUT, R-DUMP REQUIRED RESTART  
DR 2971  
2 WAY TRACK 0649-1300Z  
CMDS XMTD 0944Z-1212Z

PASS 0249 FEB 02,1972 FEB 02,1972 DAY 033 033  
-----  
DSS 62 A.O.S. 033/1230 L.O.S. 033/2030 COMMANDS 216 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1324Z-2030Z CMD XMIT 1430Z TO 1631Z  
1235Z-1246Z 360/75 DOWN, LOCKED OUT, R-DUMP REQ-RESTART DR2971  
1353Z-1407Z 360/75 DOWN, LOCKED OUT, RESTART COLD IPL,  
REF: DR 2971

PASS 0249 FEB 02,1972 FEB 03,1972 DAY 033 034

DSS 14 A.O.S. 033/1830 L.O.S. 034/0625 COMMANDS 3 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 146.7	ACTUAL 6.5	ACTUAL 7.0
PREDIC 145.1	PREDIC 6.7	PREDIC 7.6
DIFFER -1.6	DIFFER -0.2	DIFFER -0.6

TCP-B-SCI SNR	TCP-B-SCI SNR
ACTUAL 4.1	ACTUAL 2.7
PREDIC 4.8	PREDIC 3.3
DIFFER -0.7	DIFFER -0.6

0408Z-0426Z 360 DOWN, SCHEDULE IPL AND RESTART

PASS 0249 FEB 02,1972 FEB 03,1972 DAY 033 034

DSS 12 A.O.S. 033/2000 L.O.S. 034/0430 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

2127Z-2133Z DSS 12 TRANSMITTER KICKED OFF CAUSING 35 MIN DE-LAY IN TRANSMISSION OF DSS-57 CMD DR T-1811  
2 WAY 2040Z-0415Z  
CMD 2045Z-0420

PASS 0249 FEB 03,1972 FEB 03,1972 DAY 034 034

DSS 41 A.O.S. 034/0552 L.O.S. 034/1300 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

0822Z-0845Z 360/75 DOWN FOR SKED STRING SWAP TO "B" STRING  
2 WAY TRACK 0649Z-1300Z  
CMDS XMTD 1030Z-1213Z

PASS 0250 FEB 03,1972 FEB 03,1972 DAY 034 034

DSS 62 A.O.S. 034/1230 L.O.S. 034/2030 COMMANDS 177 RANGING NIL

DEVIATIONS OR ANOMALIES

1937Z-1943Z 360/75 DOWN DR 2999

PASS 0250 FEB 03,1972 FEB 04,1972 DAY 034 035

DSS 14 A.O.S. 034/1828 L.O.S. 035/0629 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 145.9	ACTUAL 11.1	ACTUAL 2.7
PREDIC 145.2	PREDIC 10.0	PREDIC 3.7
DIFFER -0.7	DIFFER +0.1	DIFFER -1.0

TCP-B-SCI SNR TCP-B-SCI SNR

ACTUAL 7.5 ACTUAL 3.7

PREDIC 8.0 PREDIC 4.4

DIFFER -0.5 DIFFER -0.7

1937Z TO 1943Z 360 DOWN DR 2999

0019Z-0031Z DIS RELOAD

0052Z-0106Z 360 DOWN, FORCE R-DUMP DR 3000  
0012Z-0028Z 360 DOWN, RELOAD DR 3000  
0224Z-0246Z 360 DOWN, BACKLOG, CONTINUED ADMINS. IPL DR3000  
0328Z-0343Z 360 DOWN, LOCKED OUT RT JOB STEP DR 3000  
0411Z-0417Z 360 DOWN, WARM RESTART DR 3000  
0402Z-0406Z 360 DOWN, RELOAD DR 3000  
2 WAY TRACK 0521Z-0629Z  
CMDS XMITD 0515Z-0601Z

---

PASS 0250 FEB 03,1972 FEB 04,1972 DAY 034 035

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DSS 12 A.O.S. 034/2000 L.O.S. 035/0422 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

DIS DOWN 2000Z-2127Z. UNABLE TO ACCESS PROGRAM  
0057Z-0166Z 360 DOWN, FORCE R-DUMP TO GET BACK DR 3000  
0017Z-0028Z 360 DOWN, RELOAD REQ. DR 3000  
0224Z-0246Z 360 DOWN, BACKLOG-CONTINUS ADMINS. IPL DR 3000  
0328Z-0343Z 360 DOWN, LOCKED OUT RT JOB STEP DR 3000  
0411Z-0417Z 360 DOWN, WARM RESTART DR 3000  
0153Z- EOT-NO PSEUDO/RESIDUALS  
2 WAY TRACK 2055Z-0420Z  
CMDS XMTD 2257Z-0408Z

---

PASS 0250 FEB 04,1972 FEB 04,1972 DAY 035 035

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DSS 41 A.O.S. 035/0557 L.O.S. 035/1300 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0602Z TCP RELOAD  
0758Z-0813Z 360/75 B DOWN, PROCESS STOPPED, LOCKED DR 3000  
0936Z-0952Z 360/75 B DOWN, LOCKED OUT ADMIN. COLD IPL DR 3000  
2 WAY TRACK 0634Z-1255Z  
CMDS XMITD 1029Z-1225Z

---

PASS 0251 FEB 04,1972 FEB 04,1972 DAY 035 035

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DSS 62 A.O.S. 035/1230 L.O.S. 035/2030 COMMANDS 209 RANGING NIL

DEVIATIONS OR ANOMALIES

1321Z-1330Z 360/75B DOWN, DUE TO NAT TRACK PROBLEMS, COLD IPL  
DR 3005  
2 WAY TRACK 1255Z-2030Z  
CMDS XMTD 1310Z-2015Z

---

PASS 0251 FEB 04,1972 FEB 05,1972 DAY 035 036

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DSS 14 A.O.S. 035/1826 L.O.S. 036/0628 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2AGC	RX 1,2 AGC	TCP-A-ENG SNR
ACTUAL 145.5	ACTUAL 145.2	ACTUAL 11.5
PREDIC 145.2	PREDIC 145.2	PREDIC 11.3
DIFFER -0.3	DIFFER 0.0	DIFFER +0.2
TCP-A-ENG SNR		TCP-B-SCI SNR
ACTUAL 10.9	ACTUAL 2.6	ACTUAL 2.6
PREDIC 10.8	PREDIC 3.7	PREDIC 3.7
DIFFER +0.1	DIFFER -1.1	DIFFER -1.1

TCP-B-SCI	TCP-B-SCI SNR
ACTUAL 3.7	ACTUAL 7.3
PREDIC 4.6	PREDIC 7.9
DIFFER -0.9	DIFFER -0.6
0003Z-0018Z 360 DOWN FORCE R-DUMP DR 3009	
0508Z-0523Z 360 DOWN WARM IPL, WARM RESTART DR 3010	
2 WAY 0415Z-0626Z	
CMD 0430Z-0605Z	

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PASS 0251 FEB 04,1972 FEB 05,1972 DAY 035 036

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DSS 12 A.O.S. 035/2000 L.O.S. 036/0430 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

0003Z-0018Z 360 DOWN- FORCE R-DUMP DR 3009  
2 WAY 2030Z-0415Z  
CMDS 2041Z-0410Z

---

PASS 0251 FEB 05,1972 FEB 05,1972 DAY 036 036

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DSS 41 A.O.S. 036/0556 L.O.S. 036/1500 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

0612Z-RELOAD TCP-A  
1015Z-1027Z 360/75 DOWN-HUNG UP, NO REASON GIVEN DR 3011  
1300 LOS DSS 41-HSD FOR DTV REMOVED BEFORE LAST RECORDINGS  
WERE RECORDED

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PASS 0252 FEB 05,1972 FEB 05,1972 DAY 036 036

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DSS 62 A.O.S. 036/1233 L.O.S. 036/2030 COMMANDS 193 RANGING NIL

DEVIATIONS OR ANOMALIES

1750Z-1824Z- 360/75B DOWN, REPLACE HS PTR PART NO DR  
1931Z-1956Z 360/75B DOWN,LOCKED OUT, CANX R/T JOB, FORCE  
R-DUMP DR 3015  
2 WAY TRACK 1255Z-2030Z  
CMDS XMTD 1310Z-2015Z

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PASS 0252 FEB 05,1972 FEB 06,1972 DAY 036 037

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DSS 14 A.O.S. 036/1824 L.O.S. 037/0625 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-B-ENG SNR	TCP-A-SCI SNR
ACTUAL 146.3	ACTUAL 10.9	ACTUAL 2.1
PREDIC 145.3	PREDIC 11.0	PREDIC 3.0
DIFFER -1.0	DIFFER -0.1	DIFFER -0.9

TCP-A-SCI SNR	TCP-A-SCI SNR
ACTUAL 7.0	ACTUAL 3.8
PREDIC 7.8	PREDIC 4.6
DIFFER -0.7	DIFFER -0.8
1824Z-2103Z DIS DOWN AT AOS, R/T SCHED. MAINT, UNABLE TO ENTER CORRECT DOY ON DIS TIME NO DR	
1931Z-1956Z 360/75B DOWN, CANX R/T JOB, FORCE R-DUMP, WARM RESTART, DR 3015 (SYS LOCKED UP)	

PASS 0252 FEB 05,1972 FEB 06,1972 DAY 036 037  
-----  
DSS 12 A.O.S. 036/2000 L.O.S. 037/0417 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

NONE

PASS 0252 FEB 06,1972 FEB 06,1972 DAY 037 037  
-----  
DSS 41 A.O.S. 037/0600 L.O.S. 037/1258 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0627-0635Z LOST DSN DTV FORMATS. 3100 GYST. NOT DOWN NO DR  
0815Z-0934Z LOST DTV REF DR 3018  
3917Z-0934Z 360/75 DOWN- IPL DR 3018  
0650Z-1258Z 2 WAY  
0650Z-1240Z CMD XMITTED

PASS 0253 FEB 06,1972 FEB 06,1972 DAY 037 037  
-----  
DSS 62 A.O.S. 037/1230 L.O.S. 037/2030 COMMANDS 204 RANGING NIL

DEVIATIONS OR ANOMALIES

1721Z-1729Z 360/75B DOWN, 2260'S LOCKED OUT, WARM RESTART,  
NO DR  
1900Z-2005Z DIS DISABLED FOR ODR RECALLS, NO DR, SCHEDULED  
PALYBACK  
2002Z-2006Z 3100 DOWN, HUNG UP, RESTART REQ DR 3019  
2025Z 2029Z 3100 DOWN, HUNG UP, RESTART REQ DR 3019  
2 WAY TRACK 1255Z-2030Z  
CMDS XMTD 1310Z-2015Z

PASS 0253 FEB 06,1972 FEB 07,1972 DAY 037 038  
-----  
DSS 14 A.O.S. 037/1822 L.O.S. 038/0627 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 146.4	ACTUAL 10.7	ACTUAL 2.4
PREDIC 145.4	PREDIC 10.8	PREDIC 2.9
DIFFER -1.0	DIFFER -0.1	DIFFER -0.5
TCP-B-SCI SNR		
ACTUAL 7.0	ACTUAL 2.8	
PREDIC 7.8	PREDIC 4.4	
DIFFER -0.8	DIFFER -1.6	
2002Z-2006Z 3100 DOWN, HUNG UP, RESTART REQ, DR 3019		
2025Z-2029Z 3100 DOWN, HUNG UP, RESTART REQ, DR 3019		
2100Z TCP-A-ENG DATA LOW SNR, RELOAD NO GOOD, SWAPPED TO		
TCP-B DR T-1820 REFERS		
0201Z-0213Z 360 DOWN IPL DR 3015		
2 WAY 0410Z-0620Z		
CMD 0415Z-0605Z		

PASS 0253 FEB 06,1972 FEB 07,1972 DAY 037 038  
-----  
DSS 12 A.O.S. 037/2000 L.O.S. 038/0410 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2002Z-2006Z 3100 DOWN, HUNG UP, RESTART REQ, DR 3019  
2025Z-2029Z 3100 DOWN HUNG UP, RESTART REQ, DR 3019  
0210Z-0213Z 360 DOWN, IPL DR 3015  
2 WAY 2030Z-0410Z  
2047Z-0405 CMD

PASS 0253 FEB 07,1972 FEB 07,1972 DAY 038 038  
-----  
DSS 41 A.O.S. 038/0538 L.O.S. 038/1250 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0545Z-0547Z HSD DOWN  
0558Z RELOAD TCP-A DUE TO CMD SYS PN QUAL ERROR ALARM  
0638Z SWITCH TO TCP-B  
0653Z RELOAD TCP-B  
1106Z-1124Z DTV DOWN 3100 PROBLEMS DR 3020  
1209Z-1215Z 360/75 DOWN DR 3021

PASS 0254 FEB 07,1972 FEB 07,1972 DAY 038 038  
-----  
DSS 62 A.O.S. 038/1220 L.O.S. 038/2150 COMMANDS 238 RANGING NIL

DEVIATIONS OR ANOMALIES

LOS EXTENDED DUE DSS-12 TCP-A,CMA INTERFACE PROBLEMS  
2 WAY TRACK 1250Z-2150Z CMDS XMITTED 1305Z-2138Z

PASS 0254 FEB 07,1972 FEB 08,1972 DAY 038 039  
-----  
DSS 14 A.O.S. 038/1820 L.O.S. 039/0626 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B DOWN SCI DATA ON TCP A CNLY  
2223Z-2251Z 360/75B DOWN ERRORS ON MSD PACKS DR 5629  
0003Z-0016Z,0021Z-0027Z 360/75 DOWN DR 3000  
0036Z-0041Z 360/75 DOWN REF DR 3000  
0044Z-0054Z 360/75 DOWN 2260'S LOCKED OUT REF DR 3000  
0321Z-0330Z 360/75 DOWN 3100 HUNG UP  
0435Z-0626Z 2 WAY 0435Z-0605Z CMDS XMITTED

PASS 0254 FEB 07,1972 FEB 08,1972 DAY 038 039  
-----  
DSS 12 A.O.S. 038/2000 L.O.S. 039/0411 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

2018Z-2134Z TCP-A CMA PROBLEMS  
2223Z-2251Z 360 B DOWN WARM IPL WARM RESTART DR 5629  
0003Z-0016Z 360 B DOWN WARM RESTART DR 3000  
0021Z-0027Z 360 B DOWN WARM RESTART DR 3000  
0036Z-0041Z 360 B DOWN COLD IPL DR 3000  
0044Z-0059Z 360 B DOWN 2260 LOCK OUT WARM IPL COLD RT JOB STEP  
DR 3000  
0321Z-0330Z 3100 DOWN HUNG UP RESTART REQ NO DR  
2 WAY TRACK 2150Z-0410Z CMDS XMITTED 2159Z-0403Z

PASS 0254 FEB 08,1972 FEB 08,1972 DAY 039 039  
-----  
DSS 41 A.O.S. 039/0543 L.O.S. 039/1250 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0645Z-1250Z 2 WAY 0852Z-1235Z CMDS XMITTED  
0630Z-0659Z DSN DTV FMTS NOT UPDATING  
0650Z-0659Z 360/75 DOWN TO CORRECT DTV PROBLEM AND TLM PROCESS  
LOCK OUT DR 3018  
0706Z-0719Z,0722Z-0731Z,0749Z-0756Z 360 DOWN DR 3011  
0805Z-0816Z 360 DOWN REF DR 3011  
0829Z-0836Z 360 DOWN DR 3004  
0922Z-0934Z HSD DOWN MICROWAVE PROBLEM DR 4752  
0835Z-0845Z TCP B PROBLEM DR 1828  
0944Z-0950Z HSD DOWN BAD LINE BETWEEN JPL AND GODDARD DR 4753  
1057Z-1241Z 360/75 DOWN DR 3032  
1234Z-1241Z 360/75 DOWN CANNOT DELETE DSS 41 PROCESS DR 3033

PASS 0254 FEB 08,1972 FEB 08,1972 DAY 039 039  
-----  
DSS 42 A.O.S. 039/0609 L.O.S. 039/0652 COMMANDS N/R RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0255 FEB 08,1972 FEB 08,1972 DAY 039 039  
-----  
DSS 51 A.O.S. 039/1200 L.O.S. 039/1600 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1234Z-1241Z 360/75B DOWN CANNOT DELETE DSS 41 DR 3033  
1314Z-1326Z 3100 DOWN REF DR 3020  
3 WAY TRACKS NO CMDS

PASS 0255 FEB 08,1972 FEB 08,1972 DAY 039 039  
-----  
DSS 62 A.O.S. 039/1220 L.O.S. 039/2030 COMMANDS 201 RANGING NIL

DEVIATIONS OR ANOMALIES

1234Z-1241Z 360/75B CANNOT DSS 41 PROCESS DR 3033  
1314Z-1326Z 3100 DOWN REF DR 3020  
2 WAY TRACK 1250Z-2030Z CMDS XMITTED 1305Z-2015Z

PASS 0255 FEB 08,1972 FEB 09,1972 DAY 039 040  
-----  
DSS 14 A.O.S. 039/1818 L.O.S. 040/0625 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2AGC	TCP-B-ENG SNR	TCP-A-SCI SNR
ACTUAL 146.4	ACTUAL 10.0	ACTUAL 3.2
PREDIC 145.5	PREDIC 10.6	PREDIC 4.9
DIFFER -0.9	DIFFER -0.6	DIFFER -0.7

TCP-A-SCI SNR	TCP-A-SCI SNR
ACTUAL 2.6	ACTUAL 1.9
PREDIC 3.9	PREDIC 2.7
DIFFER -1.3	DIFFER -0.8

1948Z-TCP-B LOST ODR TAPE WRITE CAP BILITY, ENG DATA TAKEN  
OFF LINE, HI RATE DATA ONLY ON LINE TCP-A

2045Z-2046Z DIS HUNG UP RELOAD REQ NO DR  
2059Z-2103Z DIS HUNG UP RELOAD REQ NO DR  
2103Z-2117Z 360/75B DOWN, 2260'S LOCKED, CANX R/T JOB, WARM RESTART, FAILED, FORCE R-DUMP, WARM IPL/RESTART DR 3036  
2129Z-2143Z 360/75B DOWN, CMD RECALL PROB'S CANCELLED R/T JOB, FAILED, WARM IPL/RESTART DR 3036  
2 WAY 0405Z-0620  
CMD 0410Z-0600Z

PASS 0255 FEB 08,1972 FEB 09,1972 DAY 039 040  
-----  
DSS 12 A.O.S. 039/2000 L.O.S. 040/0406 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

2030Z-2032Z DIS HUNG UP  
2103Z-2117Z 360/75B DOWN 2260'S LOCKED OUT DR 3036  
2129Z-2143Z 360/75B DOWN CMD RECALL PROBLEM DR 3036  
2 WAY 2030Z-0405Z  
CMDS XMITTED 2040Z-0400Z

PASS 0255 FEB 09,1972 FEB 09,1972 DAY 040 040  
-----  
DSS 42 A.O.S. 040/0545 L.O.S. 040/1140 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0256 FEB 09,1972 FEB 09,1972 DAY 040 040  
-----  
DSS 62 A.O.S. 040/1030 L.O.S. 040/2030 COMMANDS 174 RANGING NIL

DEVIATIONS OR ANOMALIES

1331Z-1338Z 360/75 LOCKED OUT OF SYSTEM DR 3042  
1623Z-1634Z 360/75 DOWN, DTV SYS PROBS, COLD IPL/RESTART DR 3044  
1925Z-1937Z DIS TAKEN DOWN FOR ODR RECALLS, TCP-B TAKEN DOWN ALSO  
2 WAY TRACK 1140Z-2030Z CMDS XMTD 1148Z-2018Z

PASS 0256 FEB 09,1972 FEB 10,1972 DAY 040 041  
-----  
DSS 14 A.O.S. 040/1815 L.O.S. 041/0625 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX1,2 AGC	TCPA-ENGSNR	TCPB-SCISNR
ACTUAL-147.4DBM	ACTUAL 6.1	ACTUAL 3.6
PREDIC-146.5DBM	PREDIC 7.9	PREDIC 4.4
DIFFER- -0.9DB	DIFFER -1.8	DIFFER -0.8
TCPB-SCI SNR	TCPB-SCISNR	
PREDIC 7.7	PREDIC 3.2	
DIFFER -0.9	DIFFER -1.6	

PASS 0256 FEB 09,1972 FEB 10,1972 DAY 040 041  
-----  
DSS 12 A.O.S. 040/2000 L.O.S. 041/0420 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

2105Z-2118Z 360/75B-DOWN, CMD PROBS, WARM IPL/RESTART DR 3048  
0032Z-0043Z 360/75B-DOWN DUE CORE FRAG., WARM IPL/WARM RE-  
START DR 3051  
0123Z-0148Z 360/75B DOWN DUE CORE FRAG., COLD RESTART ON  
R/T JOB DR 3051  
2 WAY TRACK 2055Z-0420Z  
CMDS XMTD 1148Z-2018Z

PASS 0256 FEB 10,1972 FEB 10,1972 DAY 041 041  
-----  
DSS 41 A.O.S. 041/0538 L.O.S. 041/1200 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

06 5Z-0809Z; 1000Z-1200Z 2 WAY TRACK  
0712Z-0752Z; 1000Z-1145Z CMD XMTD

PASS 0257 FEB 10,1972 FEB 10,1972 DAY 041 041  
-----  
DSS 62 A.O.S. 041/1130 L.O.S. 041/2030 COMMANDS 603 RANGING NIL

DEVIATIONS OR ANOMALIES

1754Z-1808Z 360 DOWN DR 3061

PASS 0257 FEB 10,1972 FEB 11,1972 DAY 041 042  
-----  
DSS 14 A.O.S. 041/1814 L.O.S. 042/0623 COMMANDS 1 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 147.4	ACTUAL 6.0	ACTUAL 3.6
PREDIC 146.6	PREDIC 6.1	PREDIC 4.3
DIFFER -0.8	DIFFFR -0.1	DIFFER -0.7
TCP-B-SCI SNR		
PREDIC 7.6	TCP-B-SCI SNR	PREDIC 2.5
DIFFER -0.8	DIFFER -0.8	
1723Z-1733Z, 1108 DOWN NO DR		
1754Z-1808Z 360/75 DOWN DR 3061		
2017Z-2028Z 360/75 DOWN SCHED.		
2055Z-2113Z 360/75 DOWN DR 3064		
2143Z-2153Z 360/75 DOWN		
2231Z-2239Z 360/75 DOWN		
2 WAY TRACK 0435Z-0623Z		
CMDS XMTD 0555Z-0620Z		

PASS 0257 FEB 10,1972 FEB 11,1972 DAY 041 042  
-----  
DSS 12 A.O.S. 041/2000 L.O.S. 042/0410 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

2017-2028 360/75 DOWN (SKED)  
2055-2114Z 360/75 DOWN DR 3064  
2143Z-2153Z 360/75 DOWN

2231Z-2239Z 360/75 DOWN  
2-WAY TRACK 2055Z-0410Z  
CMDS XMTD 721 5Z-0336Z

PASS 0257 FEB 11,1972 FEB 11,1972 DAY 042 042  
-----  
DSS 41 A.O.S. 042/0539 L.O.S. 042/1240 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS 0539-0612Z DIS DOWN DUE TO TIME PROBLEM NO DR  
1216Z-1222Z 360/75 DOWN FOR SCHEDUEL SWAP TO "A" STRING  
0645Z-1240Z 2 WAY  
0646Z-1225Z CMDS XMITTED

PASS 0258 FEB 11,1972 FEB 11,1972 DAY 042 042  
-----  
DSS 62 A.O.S. 042/1210 L.O.S. 042/2035 COMMANDS 245 RANGING NIL

DEVIATIONS OR ANOMALIES

1306Z-2035Z 2 WAY 1241:51Z-2020Z 245 CMDS  
1216Z-1222Z 360/75 DOWN FOR SCHED STRING SWAP  
1831Z-1837Z 360/75 DOWN FOR VERSION CHANGE  
1256Z-1312Z 360/75 DOWN, CAUSE UNKNOWN DR 3074  
2027Z-2034Z 360/75 DOWN, DSS 51 PNF SIM DATA PROBABLE CAUSE.  
DTV FORMAT 02 UNAVAILABLE TO RECORD DIS/TCP LGWR AND LGER  
DR 3078

PASS 0258 FEB 11,1972 FEB 12,1972 DAY 042 043  
-----  
DSS 14 A.O.S. 042/1811 L.O.S. 043/0621 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP/DIS ENABLED 1810Z  
1831Z-1837Z 360/75 DOWN FOR VERSION CHANGE  
2029Z-2034Z 360/75 DOWN DSS 51 DATA PROBLEMS DR 3078  
2207Z-2250Z 360/75 TAPE ALLOCATION PROBLEM STRING SWAP TO A  
DR 3080-DR 3082  
2341Z-2350Z 360/75 DOWN 2260 LOCKED OUT DR 3084  
0409Z-0432Z 360/75 DOWN DR 3089  
DR N-0075 D/L -2.1DB BELOW PREDIX  
2 WAY 0400Z-0621Z CMDS XMITTED 0538Z

PASS 0258 FEB 11,1972 FEB 12,1972 DAY 042 043  
-----  
DSS 12 A.O.S. 042/2000 L.O.S. 043/0400 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

2027Z-2034Z 360/75 DOWN, DSS51(PN-F SIM) DATA PROBABLE CAUSE  
DR 3078  
2207Z-2250Z 360/75 DOWN, TAPE ALLOCATION PROBLEM (2227Z)  
PRINTER NEEDED TO IPL DOWN 2232Z RE IPL TO GET PRINTER UP!  
UNABLE TO GET "A" SYSTEM UP-STRING SWAP TO "B" 2238Z  
REF DR 3082 AND 5081  
2341Z-2350Z 360/75 DOWN, 2260'S LOCKED OUT 3084  
2 WAY TRACK 2101Z-0403Z  
CMDS XMTD 2019Z-0334Z

PASS 0258 FEB 12,1972 FEB 12,1972 DAY 043 043

DSS 41 A.O.S. 043/0539 L.O.S. 043/1240 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

0557Z TCP-A RELOADED DUE TO CMD CHECKOUT ERRORS NO DR  
2 WAY TRACK 0945Z-1240Z CMDS XMITTED 0957Z-1225Z

PASS 0259 FEB 12,1972 FEB 12,1972 DAY 043 043

DSS 62 A.O.S. 043/1210 L.O.S. 043/2030 COMMANDS 280 RANGING NIL

DEVIATIONS OR ANOMALIES

1651Z-1656Z RELOAD DIS  
1823Z-1833Z 360 DOWN DR 3093

PASS 0259 FEB 12,1972 FEB 13,1972 DAY 043 044

DSS 14 A.O.S. 043/1809 L.O.S. 044/0623 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1823Z-1833Z 360/75 DOWN DR 3093  
2018Z-2042Z NO ENG DATA DUE TO EXPERIMENT  
1954Z-2022Z SDA NO 4 CAUSING SNR FLUCTUATIONS DR T-1834

PASS 0259 FEB 12,1972 FEB 13,1972 DAY 043 044

DSS 12 A.O.S. 043/2125 L.O.S. 044/0025 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0259 FEB 13,1972 FEB 13,1972 DAY 044 044

DSS 41 A.O.S. 044/0535 L.O.S. 044/1225 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

0738Z-0758Z 360/758 DOWN FOR STRING SWAP NO DR  
2 WAY TRACK 0550Z-1220Z CMDS XMITTED 0605Z-1211Z

PASS 0260 FEB 13,1972 FEB 13,1972 DAY 044 044

DSS 62 A.O.S. 044/1210 L.O.S. 044/2032 COMMANDS 226 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY 1246Z-2032Z  
CMDS XMITTED 1223Z-2015Z

PASS 0260 FEB 13,1972 FEB 14,1972 DAY 044 045  
-----  
DSS 14 A.O.S. 044/1807 L.O.S. 045/0622 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

1852Z-1854Z ROL/RIL EMERGENCY STOP SWITCH FAILED DR T-1835  
2130Z-2133Z TCP-A HUNG-UP DR T-1836  
0407Z-0413Z 360/75 DOWN DR 3095  
DR N-0076 T-64 ON 50 BPS SNR -2.0DB  
DR T-1837 BDA OUT OF LOCK NO RE  
2 WAY TRACK 0426Z-0615Z CMDS XMITTED 0324Z-0334Z

PASS 0260 FEB 13,1972 FEB 14,1972 DAY 044 045  
-----  
DSS 12 A.O.S. 044/2116 L.O.S. 045/0024 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

SKED AOS AND ACTUAL TIME OFF DUE TO SKED ERROR  
2135Z-2140Z TCP-B RELOAD NO DR  
2 WAY 2155Z-0024Z CMDS XMITTED 2211Z-0001Z

PASS 0260 FEB 14,1972 FEB 14,1972 DAY 045 045  
-----  
DSS 42 A.O.S. 045/0156 L.O.S. 045/1104 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

RELEASED AFTER 2-WAY TRANSFER  
0418Z UNABLE TO LOCK SSA TO SDA 2 DR T-1838  
0610Z LOW SCI SNR DUE TO BAD ISO AMP DR T-1839  
LOST TCP-A I/O ACCESS DR T-1841  
2 WAY TRACK 0205Z-1045Z  
CMDS XMITTED 0220Z-1041Z

PASS 0261 FEB 14,1972 FEB 14,1972 DAY 045 045  
-----  
DSS 62 A.O.S. 045/1011 L.O.S. 045/1851 COMMANDS 275 RANGING NIL

DEVIATIONS OR ANOMALIES

1045Z-1851Z 2 WAY CMDS XMITTED 1048Z-1840Z  
1851Z DSS 62 LOS EARLY NAA NOT NOTIFIED OF CHANGE

PASS 0261 FEB 14,1972 FEB 15,1972 DAY 045 046  
-----  
DSS 12 A.O.S. 045/2105 L.O.S. 046/0023 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

2147Z-0023Z 2 WAY 2131Z-0016Z 17 CMDS

PASS 0262 FEB 15,1972 FEB 16,1972 DAY 046 047  
-----  
DSS 14 A.O.S. 046/1802 L.O.S. 047/0620 COMMANDS RANGING NIL

DEVIATIONS OR ANOMALIES

DIS LGWR AND LGER HANG UP AT AOS  
2110Z-2115Z 360/75 DOWN DR 3108

0051Z-0015Z 360/75 DOWN BAD DISC MODULE DR 3110  
0348Z-0405Z 360/75 DOWN DR 3112  
0600Z-0607Z 360/75 DOWN DR 3113  
DR T-1848 UNABLE TO ACCESS TCP-B  
1 AND 3 WAY TRACK NO CMDS

PASS 0262 FEB 15,1972 FEB 16,1972 DAY 046 047

DSS 12 A.O.S. 046/2120 L.O.S. 047/0026 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

2209Z-0019Z CMDS XMTD  
2207Z-0026Z 2 WAY TRACK

PASS 0262 FEB 16,1972 FEB 16,1972 DAY 047 047

DSS 41 A.O.S. 047/0156 L.O.S. 047/1216 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

0348Z-0405Z 360/75B DOWN WARM IPL/COLD RT JCB STEP DR 3112  
0600Z-0607Z 360/75B DOWN WARM RESTART ON RT JOB STEP DR 3113  
0649Z-0656Z 360/75B DOWN WARM RESTART ON RT JOB STEP DR 3114  
0819Z-0836Z 360/75B DOWN LOCKED OUT R DUMP WARM IPL DR 3115  
1212Z-1221Z 3100 DOWN HUNG UP RELOAD REQ DR 3119  
NET CONTROL LOGS R/O ALARMS RCVD WHEN DDA A SWITCHED OFF  
DR T-1849  
2 WAY TRACK 0814Z-1216Z  
CMDS XMITTED 0936Z-1201Z

PASS 0263 FEB 16,1972 FEB 16,1972 DAY 047 047

DSS 62 A.O.S. 047/1145 L.O.S. 047/1917 COMMANDS 235 RANGING NIL

DEVIATIONS OR ANOMALIES

1236Z-1256Z 360/75B DOWN, NATTEL SCR TAPE WRITE PROBS,  
WARM RESTART REQUIRED REF DR 3106  
1242Z-1917Z 2 WAY  
1231Z-1845Z 235 CMDS

PASS 0263 FEB 16,1972 FEB 17,1972 DAY 047 048

DSS 14 A.O.S. 047/1801 L.O.S. 048/0619 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR  
ACTUAL 3.1  
PREDIC 3.8  
DIFFER -0.7  
1800Z-1811Z 360/75B DOWN, 2260'S LOCKED OUT WARM RESTART  
REQ DR 3106  
2204Z-2216Z 360/75B DOWN, 2260'S LOCKED OUT, WARM RESTART  
REQ DR 3123  
0008Z-0017Z 360/75B DOWN-LOCK OUT OF DTV DR 3126  
0233Z-0243Z 360/75B DOWN-LOCK OUT OF DTV DR 3128  
1740Z CONTINOUS CONFIGURATION WORD CHECK FAILURE ON TCP-A,  
SYSTEM RED, DR 0088

PASS 0263 FEB 16,1972 FEB 17,1972 DAY 047 048  
-----  
DSS 12 A.O.S. 047/2123 L.O.S. 048/0019 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2204Z-2216Z 360 DOWN DR 3123  
0008Z-0017Z 360 DOWN-LOCKOUT OF DTV DR 3126  
2200Z-0019Z 2 WAY TRACK  
2200Z-0008Z CMD XMITTED

PASS 0263 FEB 17,1972 FEB 17,1972 DAY 048 048  
-----  
DSS 41 A.O.S. 048/0155 L.O.S. 048/1015 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0264 FEB 17,1972 FEB 17,1972 DAY 048 048  
-----  
DSS 62 A.O.S. 048/1005 L.O.S. 048/1857 COMMANDS 252 RANGING NIL

DEVIATIONS OR ANOMALIES

1030Z-1036Z 360B DOWN TLM PROC HUNG UP CANCEL RT JOB STEP-  
WARM RESTART DR 3133  
1711Z-1717Z 360 DOWN WARM RESTART

PASS 0264 FEB 17,1972 FEB 18,1972 DAY 048 049  
-----  
DSS 12 A.O.S. 048/2120 L.O.S. 049/0019 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP "B" AND LGWR AND LGER HUNG UP. STATION WILL NOT RELOAD  
TO CORRECT PROBLEM AT THIS TIME DR T 1852

PASS 0264 FEB 18,1972 FEB 18,1972 DAY 049 049  
-----  
DSS 41 A.O.S. 049/0154 L.O.S. 049/1015 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

STATION RELEASED AFTER TWO WAY TRANSFER  
2 WAY TRACK 0159Z-1015Z CMDS XMITTED 0214Z-1000Z

PASS 0265 FEB 18,1972 FEB 18,1972 DAY 049 049  
-----  
DSS 62 A.O.S. 049/1002 L.O.S. 049/1836 COMMANDS 284 RANGING NIL

DEVIATIONS OR ANOMALIES

1515Z-1529Z 360/758 DOWN, TLM PROC HALTED, WARM IPL/RESTART  
DR 3146  
1832Z LOS, 360/758 DOWN, RESTART REQ DR 3123  
2 WAY TRACK 1042Z-1836Z  
CMDS XMTD 1510Z-1733Z

PASS 0265 FEB 18,1972 FEB 19,1972 DAY 049 050

DSS 14 A.O.S. 049/1756 L.O.S. 050/0618 COMMANDS 1 RANGING MU

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR  
ACTUAL 2.4  
PREDIC 3.2  
DIFFER -0.8  
1832Z-1837Z 360/758 DOWN RESTART REQ DR 3123  
2244Z-2251Z 360/758 DOWN RESTART REQ DR 3153  
0014Z-0022Z 360/758 DOWN DR 3155  
0538Z-0609Z 360/758 DOWN, POWER FAILURE ON DISK PACKS,  
COLD/WARM RESTART DR 3158  
0520Z-0618Z 2 WAY  
0520Z-0555Z CMD XMITTED

PASS 0265 FEB 18,1972 FEB 19,1972 DAY 049 050

DSS 12 A.O.S. 049/2123 L.O.S. 050/3009 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

2244Z-2251Z 360/758 DOWN, RESTART REQ DR 3153  
2159Z-0009Z 2 WAY TRACK  
2159Z-0002Z CMDS XMITTED

PASS 0265 FEB 19,1972 FEB 19,1972 DAY 050 050

DSS 41 A.O.S. 050/0153 L.O.S. 050/1010 COMMANDS 5 RANGING NIL

DEVIATIONS OR ANOMALIES

DOP NOISE N/A DUE TO VCO TEST  
2 WAY 0243Z-0455Z, 0955Z-1010Z  
0221Z-0440Z, 0940Z-0955Z 5 CMDS  
0538Z-0609Z 360/75 DOWN, COLD IPL AND WARM RESTART REQUIRED  
DR 3158

PASS 0266 FEB 19,1972 FEB 19,1972 DAY 050 050

DSS 62 A.O.S. 050/1003 L.O.S. 050/1854 COMMANDS 305 RANGING NIL

DEVIATIONS OR ANOMALIES

1049Z-1147Z 360/75 DOWN, DTV'S HALTED, 2260'S LOCKED OUT.  
WARM IPL AND WARM RESTART REQUIRED DR 3859 HAD TO SWAP TO  
360/75A SYSTEM  
2 WAY TRACK 1037Z-1854Z  
CMDS XMITTED 1039Z-1727Z

PASS 0266 FEB 19,1972 FEB 20,1972 DAY 050 051

DSS 12 A.O.S. 050/2123 L.O.S. 051/0028 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS 2157Z NO TCP/DIS INTERFACE  
2143Z-2147Z DIS RELOAD IN ATTEMPT TO GET TCP/DIS INTERFACE UP

PASS 0266 FEB 20,1972 FEB 20,1972 DAY 051 051  
-----  
DSS 41 A.O.S. 051/0153 L.O.S. 051/1010 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0525Z-0533Z 360/75 DOWN-SCHEDULE STRING SWAP. UP ON "B"  
STRING  
0723Z-TCP REINITIALIZED AND SWITCHED TO TCP "B" DRT 1854 DR N0096  
2305Z-1010Z 2 WAY TRACK  
2305Z-0955Z CMDS XMITTED

PASS 0266 FEB 20,1972 FEB 21,1972 DAY 051 052  
-----  
DSS 14 A.O.S. 051/1755 L.O.S. 052/0618 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-A RELOAD DUE LGWR/LGER PROBLEMS FROM AOS 1904Z  
0525Z-0533Z 360/75 DOWN-SCHEDULE STRING SWAP UPON "B" STRING

PASS 0267 FEB 20,1972 FEB 20,1972 DAY 051 051  
-----  
DSS 62 A.O.S. 051/0958 L.O.S. 051/1914 COMMANDS 292 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1037Z-1914Z  
CMDS XMTD 1045Z-1747Z

PASS 0267 FEB 20,1972 FEB 21,1972 DAY 051 052  
-----  
DSS 14 A.O.S. 051/1753 L.O.S. 052/0617 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2001Z-2040Z 3100 SYSTEM DOWN DR 3167  
2147Z-2202Z 360/75B DOWN, REQUIRE RESTART ON RT JOB, DUE  
TO PTR QUE PROBLEMS. RESTART DID NOT TAKE GOING WARM/WARM.  
DR 3169  
0348Z-0403Z 360/75 DOWN-SCHEDULE STRING SWAP TO "A" STRING

PASS 0267 FEB 20,1972 FEB 21,1972 DAY 051 052  
-----  
DSS 12 A.O.S. 051/2102 L.O.S. 052/0026 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2001Z-2040Z 3100 SYSTEM DOWN DR 3167  
2147Z-2202Z 360/75B DOWN, REQUIRED RESTART ON RT JOB,  
DUE TO PTR QUE PROBLEMS. RESTART DID NOT TAKE GOING WARM/WARM  
DR 3169  
2154Z-0026Z 2 WAY TRACK  
2154Z-0008Z CMDS XMITTED

PASS 0267 FEB 21,1972 FEB 21,1972 DAY 052 052  
-----  
DSS 41 A.O.S. 052/0155 L.O.S. 052/1005 COMMANDS 5 RANGING NIL

DEVIATIONS OR ANOMALIES

0234Z-1005Z 2 WAY  
0212Z-0950Z 5 CMDS  
0155Z-0222Z DIS PROBLEM-MONITOR DATA VALIDATED AT 0222Z  
NO DR  
0348Z-0403Z 360/75 DOWN FOR SCHED. STRING SWAP FROM "B"  
TO "A"

PASS 0268 FEB 21,1972 FEB 21,1972 DAY 052 052  
-----  
DSS 62 A.O.S. 052/0956 L.O.S. 052/1847 COMMANDS 258 RANGING NIL

DEVIATIONS OR ANOMALIES

1654Z-1700Z 360/75A DOWN, RESTART REQ  
2 WAY TRACK 1032Z-1847Z  
CMDS XMTD 1055Z-1801Z

PASS 0268 FEB 21,1972 FEB 22,1972 DAY 052 053  
-----  
DSS 14 A.O.S. 052/1751 L.O.S. 053/0616 COMMANDS 5 RANGING NIL

DEVIATIONS OR ANOMALIES

2231Z-2323Z 2-WAY  
2309Z 360/75 RELEASE FROM SUPPORT.

PASS 0268 FEB 22,1972 FEB 22,1972 DAY 053 053  
-----  
DSS 42 A.O.S. 053/0202 L.O.S. 053/1034 COMMANDS RANGING NIL

DEVIATIONS OR ANOMALIES

DR T-73 D/L EXCEEDED LIMIT OF 1.5 DB  
0248Z-0316Z MECHANICAL FAILURE TCP-A DR T-1858  
0248Z-0316Z LOSS OF CMD MOD DR 1860  
1026Z-1028Z LOSS OF UPLINK SIGNAL DR T-1862  
0258Z-1005Z 2 WAY 0238Z-0905Z CMDS XMITTED

PASS 0269 FEB 22,1972 FEB 22,1972 DAY 053 053  
-----  
DSS 62 A.O.S. 053/0954 L.O.S. 053/1859 COMMANDS 289 RANGING NIL

DEVIATIONS OR ANOMALIES

3 CMDS MANUALLY DUE TO 360/75 DOWN DR 3174  
1641Z-1650Z 3100 DOWN  
1703Z-1718Z 360/75A DOWN DR 3174  
2 WAY 1155Z-1859Z CMDS XMITTED 0940Z-1808Z

PASS 0269 FEB 22,1972 FEB 23,1972 DAY 053 054  
-----  
DSS 14 A.O.S. 053/1749 L.O.S. 054/0615 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0269 FEB 22,1972 FEB 23,1972 DAY 053 054

DSS 12 A.O.S. 053/2120 L.O.S. 054/0029 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY 2101Z-0029Z CMDS XMITTED 2101Z-0305Z

PASS 0269 FEB 23,1972 FEB 23,1972 DAY 054 054

DSS 41 A.O.S. 054/0151 L.O.S. 054/1215 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

1202Z-1211Z 360/75A DOWN DUE TO HEAVY BACKLOG UNABLE TO WRITE TLM SDR TAPE. SUSPECT PROBLEM DUE TO NAT TRK PRDX GENERATION DR 3177

PASS 0270 FEB 23,1972 FEB 23,1972 DAY 054 054

DSS 62 A.O.S. 054/1100 L.O.S. 054/1855 COMMANDS 292 RANGING NIL

DEVIATIONS OR ANOMALIES

1203Z-1211Z 360/75A DOWN FOR WARM RESTART. HEAVY BACKLOG UNABLE TO WRITE TLM SDR TAPE. SUSPECT PROBLEM DUE TO PRDX GENERATION DR 3177

1305Z-1330Z 360/75A TAKEN DOWN TO SPLIT SUPPORT OF PN AND MM9-WILL COME UP COLD IPL AND WARM RESTART

1826Z-1838Z 360/75A DOWN REF DR 3178

PASS 0270 FEB 23,1972 FEB 24,1972 DAY 054 055

DSS 14 A.O.S. 054/1746 L.O.S. 055/0615 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1826Z-1838Z 360 "A" DOWN RE: DR 3178

1855Z-1858Z 3100 DOWN-DTV'S STOPPED RESTART REQ

2207Z-2213Z 3100 DOWN SCHEDULED

2348Z-2356Z 360 "A" DOWN RESTART REQUIRED

0033Z-0036Z 360 "A" DOWN FOR PRINTER INSTALLATION-SCHEDULED

0036Z-0132Z DTV FMTS CONTAINING MONITOR DATA NOT DISPLAYING NUMBERS

0119Z-0132Z 360/75 "A" DOWN TO RECOVER DTV SYSTEM DR 3181

PASS 0270 FEB 23,1972 FEB 24,1972 DAY 054 055

DSS 12 A.O.S. 054/2120 L.O.S. 055/0003 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2209Z-2213Z 3100 DOWN, SCHEDULED

2348Z-2356Z 360 A DOWN, RESTART DR 3180

PASS 0270 FEB 24,1972 FEB 24,1972 DAY 055 055  
-----  
DSS 41 A.O.S. 055/0148 L.O.S. 055/1100 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

0233Z-1000Z 2 WAY  
0210Z-0945Z 2 CMDS

PASS 0271 FEB 24,1972 FEB 24,1972 DAY 055 055  
-----  
DSS 62 A.O.S. 055/0949 L.O.S. 055/1855 COMMANDS 348 RANGING NIL

DEVIATIONS OR ANOMALIES

1520Z-1538Z 360/75A TAKEN DOWN FOR RESTART DUE TO UNABLE  
TO TRANSMIT SOE'S AND DOA'S DR 3184  
1805Z-1814Z 360/75A DOWN, HSP FMT OUTPUT PROBS, WARM RE-  
START DR 3186  
2 WAY TRACK 1000Z-1855Z  
CMDS XMTD 1001Z-1845Z

PASS 0271 FEB 24,1972 FEB 25,1972 DAY 055 056  
-----  
DSS 14 A.O.S. 055/1745 L.O.S. 056/0612 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1745Z-1821Z, DIS DOWN, LOST TAPE WRITE CAPB, RELOAD REQ  
DR N-0107  
1805Z-1814Z, 360/75A DOWN, HSP FMT OUTPUT PROBS, WARM RESTART  
DR 3186  
2330Z-2338Z, 360/75A DOWN, CPU CABLES SWAPPED, NO DR  
1745Z-1821Z, NO DIS LOG WRITE-RELOAD REQ DR N-0107

PASS 0271 FEB 24,1972 FEB 25,1972 DAY 055 056  
-----  
DSS 12 A.O.S. 055/2120 L.O.S. 056/0027 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2330Z-2338Z 360/75A DOWN, CPU CABLES SWAPPED, WARM RESTART  
NO DR  
2 WAY 2134Z-0027Z  
CMD 2140Z-0020Z

PASS 0271 FEB 25,1972 FEB 25,1972 DAY 056 056  
-----  
DSS 41 A.O.S. 056/0147 L.O.S. 056/1210 COMMANDS 19 RANGING NIL

DEVIATIONS OR ANOMALIES

DR T74 WRITTEN ON EXCESSIVE RESID FOR D/L SS- TOL. PLUS OR  
MINUS 1.5DB  
0232Z-1210Z 2 WAY  
0209Z-1155Z 19 CMDS  
TFR 41/DIS/B01147 EXCESSIVE WRITE ERRORS ON DIS MAG TAPE  
ALPHA

PASS 0272 FEB 25,1972 FEB 25,1972 DAY 056 056  
-----  
DSS 62 A.O.S. 056/1100 L.O.S. 056/1859 COMMANDS 256 RANGING NIL

DEVIATIONS OR ANOMALIES

1630Z-1640Z 360/75A DOWN-WARM IPL/WARM START DR 3187  
1840Z-1845Z 360/75A DOWN-STRING SWAP-UPON "B" STRING  
1238Z-1859Z 2 WAY  
1238Z-1845Z CMD XMITTED

PASS 0272 FEB 25,1972 FEB 26,1972 DAY 056 057  
-----  
DSS 14 A.O.S. 056/1743 L.O.S. 057/0613 COMMANDS 1 RANGING MU

DEVIATIONS OR ANOMALIES

TCP-B-SCI SNR  
ACTUAL 2.3  
PREDIC 4.3  
DIFFER -2.0  
1840Z-1845Z 360 DOWN STRING SWAP UP ON "B"  
1905Z-1906Z 360 DOWN STRING SWAP UP ON "A"  
1931Z-1938Z 360 DOWN DR 3189  
2229Z-2234Z 3100 DOWN DR 3021  
2331Z-2338Z 3100 DOWN DR 3021  
0029Z-0047Z 360 DOWN FOR RESTART, COLD IPL DR 3190  
0130Z-0138Z 3100 DOWN DR 3021  
2 WAY TRACK 0515Z-0605Z  
CMD 0448Z-0545Z

PASS 0272 FEB 25,1972 FEB 26,1972 DAY 056 057  
-----  
DSS 12 A.O.S. 056/2115 L.O.S. 057/0020 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

2229Z-2234Z 3100 DOWN RE: DR 3021  
2331Z-2338Z 3100 DOWN RE: DR 3021

PASS 0272 FEB 26,1972 FEB 26,1972 DAY 057 057  
-----  
DSS 41 A.O.S. 057/0148 L.O.S. 057/1145 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

DO BIAS +35.104 1 WAY CHAR. NOISE .002 2 WAY  
0150Z-0200Z TCP-B RELOAD  
0205Z-0209Z TCP-B RELOAD  
0646Z-0700Z 360/75 DOWN; DUE TO PTR HANG-UP, CANCELLED  
RT JOB AND RESTART DR 3192  
0737Z-0748Z 360/75 DOWN, SKED STRING SWAP FROM "A" TO "B"  
MISSSED ACQ 0955Z DR 1869  
2 WAY TRACK 0234Z-1145Z  
CMDS XMTD 0417Z-1123Z

PASS 0273 FEB 26,1972 FEB 26,1972 DAY 057 057  
-----  
DSS 62 A.O.S. 057/1115 L.O.S. 057/1909 COMMANDS 220 RANGING NIL

DEVIATIONS OR ANOMALIES

NOTE: DR T-1870 REF 62B TCP RELOAD

PASS 0273 FEB 26,1972 FEB 27,1972 DAY 057 058  
-----  
DSS 14 A.O.S. 057/1740 L.O.S. 058/0613 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR  
ACTUAL 4.0  
PREDIC 4.6  
DIFFER -0.6

PASS 0273 FEB 26,1972 FEB 27,1972 DAY 057 058  
-----  
DSS 12 A.O.S. 057/2120 L.O.S. 058/0020 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 2207Z-0020Z  
CMD 2146Z-0005Z

PASS 0273 FEB 27,1972 FEB 27,1972 DAY 058 058  
-----  
DSS 41 A.O.S. 058/0145 L.O.S. 058/1020 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B RELOADS, 5 RELOADS FROM 0153Z-0627Z REF DR T-1871  
2 WAY TRACK 0228Z-0955Z  
CMDS XMTD 0437Z-0810Z

PASS 0274 FEB 27,1972 FEB 27,1972 DAY 058 058  
-----  
DSS 62 A.O.S. 058/0945 L.O.S. 058/1910 COMMANDS 222 RANGING NIL

DEVIATIONS OR ANOMALIES

1523Z-1544Z 360/75B DOWN DUE TO HARDWARE PROBLEM, A SYSTEM  
SWAP TO "A" MADE DR 3201  
1555Z-1606Z 226J-043 LOCKED OF 360/75 DR 3202  
1023Z-1910Z 2 WAY  
1023Z-1850Z CMDS XMITTED

PASS 0274 FEB 27,1972 FEB 28,1972 DAY 058 059  
-----  
DSS 14 A.O.S. 058/1759 L.O.S. 059/0612 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

3 MIN. LATE ACK DUE TO ELECTRICAL PROBLEM PAD 2 HYDROSTATIC  
EARING TFR B04365 DR T1872  
331Z-2348Z 360"A" DOWN-SCHEDULED COLD IPL  
153Z-0159Z 360 DOWN SCHEDULED STRING SWAP-UP ON "B"

CB-B-SCI  
ACTUAL 3.5  
PREDIC 3.1  
DIFFER +0.4

PASS 0274 FEB 27,1972 FEB 28,1972 DAY 058 059  
-----  
DSS 12 A.O.S. 058/2120 L.O.S. 059/0012 COMMANDS 16 RANGING NIL  
DEVIATIONS OR ANOMALIES

PASS 0274 FEB 28,1972 FEB 28,1972 DAY 059 059  
-----  
DSS 41 A.O.S. 059/0146 L.O.S. 059/1017 COMMANDS 3 RANGING NIL  
DEVIATIONS OR ANOMALIES  
0153Z-0159Z 360/75 DOWN, SKED STRING SWAP TO "B"  
2 WAY TRACK  
CMDS XMTD 0401Z-0759Z

PASS 0275 FEB 28,1972 FEB 28,1972 DAY 059 059  
-----  
DSS 62 A.O.S. 059/0941 L.O.S. 059/1906 COMMANDS 194 RANGING NIL  
DEVIATIONS OR ANOMALIES  
1018Z-1906Z 2 WAY  
1034Z-1850Z CMDS XMITTED

PASS 0275 FEB 28,1972 FEB 29,1972 DAY 059 060  
-----  
DSS 14 A.O.S. 059/1736 L.O.S. 060/0611 COMMANDS 0 RANGING NIL  
DEVIATIONS OR ANOMALIES  
TCP B SCI SNR  
ACTUAL 2.8  
PREDIC 3.1  
DIFFER -0.3

PASS 0275 FEB 28,1972 FEB 28,1972 DAY 059 059  
-----  
DSS 12 A.O.S. 059/2110 L.O.S. 059/2346 COMMANDS 8 RANGING NIL  
DEVIATIONS OR ANOMALIES  
MM-9 DATA TAKEN OFF 360 PROCESS FOR PN-F LAUNCH

PASS 0275 FEB 29,1972 FEB 29,1972 DAY 060 060  
-----  
DSS 41 A.O.S. 060/0143 L.O.S. 060/1021 COMMANDS 6 RANGING NIL  
DEVIATIONS OR ANOMALIES  
DR-N0113, D/L RSID-2.0 DB BELOW PRDX FOR RTS-I  
2 WAY TRACK 0228Z-0950Z  
CMDS XMTD 0330Z-0758Z

PASS 0276 FEB 29,1972 FEB 29,1972 DAY 060 060

DSS 62 A.O.S. 060/0941 L.O.S. 060/1916 COMMANDS 303 RANGING NIL

DEVIATIONS OR ANOMALIES

1736Z-1744Z 360/75 DOWN-STRING SWAP-UP ON "A" STRING  
1020Z-1916Z 2 WAY  
1035Z-1908Z CMD XMITTED

PASS 0276 FEB 29,1972 MAR 01,1972 DAY 060 061

DSS 14 A.O.S. 060/1734 L.O.S. 061/0610 COMMANDS 22 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR  
ACTUAL 2.6  
PREDIC 3.0  
DIFFER -0.4  
3 WAY NO CMDS  
1736Z-1744Z 360/75 DOWN STRING SWAP-UP ON "A"

PASS 0276 FEB 29,1972 MAR 01,1972 DAY 060 061

DSS 12 A.O.S. 060/2110 L.O.S. 061/0155 COMMANDS 22 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 2145Z-0155  
CMDS XMIT 2213 TO 0137

PASS 0277 MAR 01,1972 MAR 01,1972 DAY 061 061

DSS 62 A.O.S. 061/0941 L.O.S. 061/1804 COMMANDS 511 RANGING NIL

DEVIATIONS OR ANOMALIES

1000-1007Z 360/75A DOWN,LOCKED OUT OF SYSTEM.RESTART.REF DR 3215  
1236Z-1244Z 360/75A DOWN,LOCKED OUT OF SYSTEM.RESTART.  
REF DR N 3215  
1756Z-1804Z 360/75 DOWN,STRING B SWAP

PASS 0277 MAR 01,1972 MAR 02,1972 DAY 061 062

DSS 14 A.O.S. 061/1732 L.O.S. 062/0540 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP A-ENG SNR	TCP B-SCI SNR
ACTUAL 6.2	ACTUAL 2.6
PREDIC 6.4	PREDIC 2.7
RESID -0.2	RESID -0.1
2234Z-0044Z 2WAY. 2208Z-0010Z 12 CMDS	
2200Z-0200Z NO 360/75 SUPPORT DUE TO PN-F LAUNCH	
05 Z- NAT TEL WROTE DR N 114 DUE TO D/L S/S RESID IN EXCESS	
OF PLUS AND MINUS 1.5 DB	

PASS 0277 MAR 02,1972 MAR 02,1972 DAY 062 062  
-----  
DSS 41 A.O.S. 062/0145 L.O.S. 062/1035 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

2WAY TRACK. CMDS XMTD AT 0307Z-0619Z

PASS 0278 MAR 02,1972 MAR 02,1972 DAY 062 062  
-----  
DSS 62 A.O.S. 062/0937 L.O.S. 062/1752 COMMANDS 369 RANGING NIL

DEVIATIONS OR ANOMALIES

1534Z-1752Z (LOS), TCP-A LOST TAPE CAPBL., REF DR T-1880  
2-WAY TRACK 0945Z-1752Z. CMDS XMTD 0959Z-1737Z  
POST TRACK 1017Z, LOST UPLINK AT S/C. UNABLE TO HOLD 11HZ/MIN  
TUNING RATE. REF DR T-1879

PASS 0278 MAR 02,1972 MAR 03,1972 DAY 062 063  
-----  
DSS 14 A.O.S. 062/1730 L.O.S. 063/0609 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP A+ENG SNR           TCP B-SCI SNR  
ACTUAL 5.5           ACTUAL 6.0  
PREDIC 4.5           PREDIC 4.6  
RESID -1.0           RESID -2.4  
2209Z-0001Z 2 WAY, 2211Z-2336Z CMDS XMTD  
2150Z-2207Z DIS DOWN, LGWR NOT INCREMENTING, RELOAD REQUIRED  
2200Z STA DATA TAKEN OUT OF SYSTEM DUE TO PN-F LAUNCH

PASS 0278 MAR 03,1972 MAR 03,1972 DAY 063 063  
-----  
DSS 41 A.O.S. 063/0141 L.O.S. 063/1200 COMMANDS 119 RANGING NIL

DEVIATIONS OR ANOMALIES

1048Z-1059Z 360/75 DOWN, DR 3224  
2-WAY TRACK 0224Z-1200Z

PASS 0279 MAR 03,1972 MAR 03,1972 DAY 063 063  
-----  
DSS 62 A.O.S. 063/1136 L.O.S. 063/1800 COMMANDS 311 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY 1229Z-1800Z

PASS 0279 MAR 03,1972 MAR 04,1972 DAY 063 064  
-----  
DSS 14 A.O.S. 063/1731 L.O.S. 064/0609 COMMANDS 011 RANGING NIL

DEVIATIONS OR ANOMALIES

1854Z-1913Z DIS LGWR AND LGER NOT UP DATING. STATION THINKS  
THEY HAVE A MAG TAPE PROBLEM (OLD TAPE) CHANGE TAPE AND  
RELOAD DIS.

2123Z-2131Z 360 "A" DOWN, NUMEROUS PROBLEMS. WARM/WARM DR 3229  
0200Z-0206Z 360/75 DOWN DUE TO DOA A.BENDS FOR TTY DISPLAYS  
DR 3232.  
0508Z-0520Z 360/75 DOWN FOR RESTART AND IPL, DR 3233.

PASS 0279 MAR 04,1972 MAR 04,1972 DAY 064 064

DSS 41 A.O.S. 064/0140 L.O.S. 064/1035 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

0156Z-0200Z 360/75 DOWN DUE TO DOA A BENDS ON TTY DISPLAY  
RESTART REG DR 3232  
0508Z-0520Z 360/75 DOWN FOR WARM IPL AND RESTART 2260'S  
LOCKED OUT DR 3233  
0759Z-0805Z 360/75 DOWN SYSTEM SWAP UP ON "B" STRING

PASS 0280 MAR 04,1972 MAR 04,1972 DAY 064 064

DSS 62 A.O.S. 064/0955 L.O.S. 064/1759 COMMANDS 330 RANGING NIL

DEVIATIONS OR ANOMALIES

1155Z-1210Z GODDARD CP DOWN DR 4973  
1128Z-1135Z 360 "B" DOWN FOR RESTART DR 3236  
1250Z-1759Z 360 "B" DOWN, DATA TABLES-WARM WARM DR 3234

PASS 0280 MAR 04,1972 MAR 05,1972 DAY 064 065

DSS 14 A.O.S. 064/1730 L.O.S. 065/0430 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-A-ENG SNR            TCP-B-SCI SNR  
ACTUAL 17.0            ACTUAL 18.3  
PREDIC 12.9            PREDIC 18.9  
DIFFER -0.9            DIFFER -0.6  
2 WAY TRACK: 2115Z TO 0234Z  
CMDS XMIT: 2127Z-0200Z  
1756Z-1759Z 360 "B" DOWN, DATA TABLES, WARM IPL, WARM  
RESTART DR 3234  
1728Z-1935Z TTY (COMM) LINE TO 14-HIGH DISTORTION DR 4975  
2022Z-2047Z TTY (COMM) LINE TO 14-HIGH DISTORTION DR 4976  
2136Z-2150Z DIS DOWN FOR RELOAD  
0404Z-0412Z 360 DOWN, SCHED IPL, NO DR  
0412Z-LOS, NO MM9 DATA AFTER 360 OUTAGE, PEROC  
\*EARLY LOS TO SUPPORT PIONEER  
12Z-LOS, NO MM9 DATA AFTER 360 OUTAGE, PEROC  
EARLY LOS TO SUPPORT PIONEER

PASS 0280 MAR 05,1972 MAR 05,1972 DAY 065 065

DSS 41 A.O.S. 065/0140 L.O.S. 065/0950 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

0404Z-0412Z 360 DOWN, SCHED. IPL NO DR  
0412Z-0800Z NO MM9 DATA OFFER 360 OUTAGE, PER O.C.  
0813Z-0827Z 360/75 DOWN-SCHEDULE STRING SWAP

PASS 0281 MAR 05,1972 MAR 05,1972 DAY 065 065  
-----  
DSS 62 A.O.S. 065/0931 L.O.S. 065/2157 COMMANDS 357 RANGING NIL

DEVIATIONS OR ANOMALIES

1047Z-1053Z 360 A DOWN W/W DR 3238  
1443Z-1450Z 360 A DOWN C/W DR 3239  
1640Z-1645Z 360 A DOWN WARM RESTART DR 3236  
APPROX 1630 TO LOS-TCP LGWR AND LGER NOT UPDATING DUE TO DRIFT  
TEST LOW SNK  
1009Z-2157Z 2 WAY 1007Z-2145Z CMDS XMITTED

PASS 0281 MAR 05,1972 MAR 06,1972 DAY 065 066  
-----  
DSS 14 A.O.S. 065/1724 L.O.S. 066/0607 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP A ENG TCP B SCI  
21.0 18.4  
17.6 18.6  
+ 3.4 +0.2  
2226Z-0224Z 2 WAY 2220Z-2334Z CMDS XMITTED  
2039Z-2048Z 3100 DOWN DR 3021  
2351Z-2337Z 360 A DOWN DR 3236

PASS 0281 MAR 06,1972 MAR 06,1972 DAY 066 066  
-----  
DSS 41 A.O.S. 066/0142 L.O.S. 066/1025 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

360/75 DOWN FOR SYSTEM SWAP  
0224Z-1025Z 2 WAY 0224Z-0920Z CMDS XMITTED

PASS 0282 MAR 06,1972 MAR 06,1972 DAY 066 066  
-----  
DSS 62 A.O.S. 066/0929 L.O.S. 066/1807 COMMANDS 316 RANGING NIL

DEVIATIONS OR ANOMALIES

BIT RATE 50  
TCP-B-SCI  
ACTUAL 9.2  
PREDIC 9.4  
DIFFER -0.2

PASS 0282 MAR 06,1972 MAR 07,1972 DAY 066 067  
-----  
DSS 14 A.O.S. 066/1723 L.O.S. 067/0400 COMMANDS 10 RANGING MU

DEVIATIONS OR ANOMALIES

TCP A-ENG TCP-B-SCI  
ACTUAL 11.2 ACTUAL 4.6  
PREDIC 10.8 PREDIC 4.5  
DIFFER +0.4 DIFFER +0.1

1846Z-1902Z 360 "B" DOWN-WARM RESTART DR 3236  
0105Z-0112Z 360 "B" DOWN-WARM RESTART DR 3246  
0313Z-0331Z 360 "B" DOWN WARM RESTART DR 3240

PASS 0282 MAR 07,1972 MAR 07,1972 DAY 067 067  
-----  
DSS 41 A.O.S. 067/0141 L.O.S. 067/1025 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

0313Z-0331Z 360 B DOWN WARM RESTART DR 3248  
0432Z-0435Z 360 B DOWN FOR RESTART DR 3249  
0806Z-0813Z 360 B DOWN SCHEDULE WARM/WARM RESTART  
0815Z- MM9 PROCESS REMOVED FROM 360 FOR PN10 SUPPORT

PASS 0283 MAR 07,1972 MAR 07,1972 DAY 067 067  
-----  
DSS 62 A.O.S. 067/0928 L.O.S. 067/1947 COMMANDS 285 RANGING NIL

DEVIATIONS OR ANOMALIES

0928Z AOS TO LOS MM9 PROCESS PULLED OUT OF 360 DUE TO  
CRITICAL PN10 PERIOD  
2-WAY 1009Z-1947Z  
CMD 0956Z-1930Z

PASS 0283 MAR 07,1972 MAR 08,1972 DAY 067 068  
-----  
DSS 14 A.O.S. 067/1925 L.O.S. 068/0605 COMMANDS 5 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK: 0035 TO  
CMD XMIT: 2248Z-2346Z  
2016Z-2022Z 360/75 DOWN, BACKLOGGING, WARM IPL-RESTART  
DR 3249  
0148Z-0154Z 360 DOWN, TTY GUIDE TABLE CLOBBERED, RESTART  
REQ DR 3252

PASS 0283 MAR 08,1972 MAR 08,1972 DAY 068 068  
-----  
DSS 41 A.O.S. 068/0141 L.O.S. 068/1025 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

0924Z-0931Z 360 "B" DOWN RESTART DR 3253  
0242Z-1010Z 2 WAY  
0242Z-0915Z CMD XMIT

PASS 0284 MAR 08,1972 MAR 08,1972 DAY 068 068  
-----  
DSS 62 A.O.S. 068/0926 L.O.S. 068/1800 COMMANDS 273 RANGING NIL

DEVIATIONS OR ANOMALIES

0924Z-0931Z 360/75B DOWN, WARM RESTART, DR 3253  
1345Z-1100Z 360/75B DOWN FOR IPL DR 3254  
1212Z-1241Z 360/75B DOWN FOR STRING SWAP, WITH WARM START  
UP ON "A" STRING DR 3255  
1650Z-1654Z 360/75A DOWN ALL PROCESSES HALTED, WARM RESTART  
DR 3249  
2 WAY TRACK  
0959Z-1745Z

PASS 0284 MAR 08,1972 MAR 09,1972 DAY 068 069  
-----  
DSS 14 A.O.S. 068/1719 L.O.S. 069/0606 COMMANDS 8 RANGING MU  
DEVIATIONS OR ANOMALIES

2 WAY TRACK 2188Z-0017Z  
ACTUAL 16.2  
PREDIC 16.2  
DIFFER 0.0  
0235Z-0400Z PROCESS OUT OF 360/75A  
2 WAY TRACK 2138Z-0017Z

PASS 0284 MAR 09,1972 MAR 09,1972 DAY 069 069  
-----  
DSS 41 A.O.S. 069/0140 L.O.S. 069/1013 COMMANDS 12 RANGING NIL  
DEVIATIONS OR ANOMALIES

0211Z-0217Z DIS HANG-UP RELOAD  
0325Z PROCESS OUT OF 360/75A SYSTEM-0400 PROCESS ENTER IN  
0959Z-1008Z DTV HUNG-UP  
0959Z-1008Z DTV HUNG UP  
0226Z-0905Z CMD XMITTED  
0226Z-0905Z CMD XMTTED

PASS 0285 MAR 09,1972 MAR 09,1972 DAY 069 069  
-----  
DSS 62 A.O.S. 069/0924 L.O.S. 069/2142 COMMANDS 310 RANGING NIL  
DEVIATIONS OR ANOMALIES

0959Z-1008Z DTV HUNG UP  
1102Z-1116Z 360/75A DOWN RESTART REQ DR 3259  
1017Z ON TSF 5350 VICE 5340 DR T-1903  
1721Z-1725Z 360/75A DOWN BACKLOGGING WARM RESTART DR 3259  
1828Z-1836Z 360/75A DOWN DISPLAY TASKS ABEND WARM IPL DR 3259  
CMDS XMITTED 1000Z-2121Z

PASS 0285 MAR 09,1972 MAR 10,1972 DAY 069 070  
-----  
DSS 14 A.O.S. 069/1717 L.O.S. 070/0604 COMMANDS 14 RANGING NIL  
DEVIATIONS OR ANOMALIES

TCP A-ENG SNR	TCP B-SCI SNR
ACTUAL 14.5	ACTUAL 15.7
PREDIC 15.4	PREDIC 16.4
RESID -0.9	RESID -0.7
1721Z-1725Z 360/75A DOWN, BACKLOGGING, WARM RESTART. REF DR N3259	
1828Z-1836Z 360/75A DOWN, DISPLAY TASKS ABENDS, WARM IPL	
RESTART DR 3259	
0008Z-0016Z 360/75A DOWN, SKED FOR VERSION SWITCH TO V27.3	
0022Z-0027Z 360/75A DOWN, BAD LOAD ON VERSION SWITCH	
RESTART REQ	
2213Z-0053Z 2 WAY	
2213Z-0017Z CMD XMITTED	

PASS 0285 MAR 10,1972 MAR 10,1972 DAY 070 070  
-----  
DSS 41 A.O.S. 070/0139 L.O.S. 070/1000 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0286 MAR 10,1972 MAR 10,1972 DAY 070 070  
-----  
DSS 62 A.O.S. 070/0922 L.O.S. 070/1840 COMMANDS 291 RANGING NIL

DEVIATIONS OR ANOMALIES

1045Z-1053Z 360 A DOWN, WARM RESTART, DR 3269  
1315Z-1321Z 360 A DOWN, FOR SCHED. STRING SWAP TO "B" NO DR  
1339Z-1344Z 360 B DOWN, DISC SWAP  
1825Z-1832Z 360/75B DOWN FOR A DUMP DUE TO SUSPECTED S/W  
PROBLEM, UNABLE TO ACCESS SOME TTY'S, RESTART REQ. DR 3275  
2 WAY TRACK 0925Z-1843Z  
CMDS XMTD 0949Z-1815Z

PASS 0286 MAR 10,1972 MAR 11,1972 DAY 070 071  
-----  
DSS 14 A.O.S. 070/1715 L.O.S. 071/0603 COMMANDS 7 RANGING MU

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR	TCP B-SCI SNR
ACTUAL 3.0	ACTUAL 15.4
PREDIC 3.5	PREDIC 16.4
DIFFER -0.5	DIFFER -1.0

1715Z-1858Z NO LOG WRITES FROM DIS-LOG TAPE PROBLEM. DR 1906  
PROBLEM RESOLVED WITH A RELOAD  
2044Z-2047Z GODDARD CP FAULTED, RECOVERY REQUIRED DR 5034  
2301Z-2311Z 360/75 B TAKEN DOWN TO INSERT CHANGE IN  
VERSION 27.3  
0439Z-0443Z 360/75B DOWN; SKED  
2 WAY TRACK  
CMDS XMTD 2157Z-2343Z

PASS 0286 MAR 11,1972 MAR 11,1972 DAY 071 071  
-----  
DSS 42 A.O.S. 071/0510 L.O.S. 071/0935 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

0618Z-0935Z 2 WAY  
0616Z CMD XMITTED

PASS 0287 MAR 11,1972 MAR 11,1972 DAY 071 071  
-----  
DSS 62 A.O.S. 071/0928 L.O.S. 071/1851 COMMANDS 292 RANGING NIL

DEVIATIONS OR ANOMALIES

1000Z TO 1851 2-WAY  
1603Z TO 1610Z 360/75 DOWN, 2260'S LOCKED OUT, RESTART R/T JOB

PASS 0287 MAR 11,1972 MAR 12,1972 DAY 071 072  
-----  
DSS 14 A.O.S. 071/1714 L.O.S. 072/0550 COMMANDS 4 RANGING MU

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR	TCP B-SCI SNR
ACTUAL 15.5	ACTUAL 4.3
PREDIC 15.6	PREDIC 5.0
DIFF -0.1	DIFF -0.7
2205Z-2218Z 360/758 DOWN, DR 3218 WARM IPL AND WARM RESTART	
0457Z-0512Z 360/758 DOWN, WARM RESTART REQUIRED, DR 3282	
2 WAY TRACK 2144Z-0017Z	
CMDS XMTD 2253Z-2348Z	

PASS 0287 MAR 12,1972 MAR 12,1972 DAY 072 072  
-----  
DSS 41 A.O.S. 072/0137 L.O.S. 072/1000 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK:0231Z-0619Z. CMD XMT 0520Z  
0457Z-0512Z 360 DOWN,WARM RESTART REQUIRED, DR 3282  
0747Z-0819Z 360 DOWN FOR STRING SWAP

PASS 0288 MAR 12,1972 MAR 12,1972 DAY 072 072  
-----  
DSS 62 A.O.S. 072/0921 L.O.S. 072/2143 COMMANDS 278 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2	TCP A ENG	TCP B SCI
161.2	11.4	2.0
160.4	11.9	5.5
-0.9	-0.5	-3.5
1002Z-2143Z 2 WAY		0953Z-2123Z 278 CMDS
1310Z-1320Z 360/758 DOWN DUE TO H/S PTR DR 3284		

PASS 0288 MAR 12,1972 MAR 13,1972 DAY 072 073  
-----  
DSS 14 A.O.S. 072/1712 L.O.S. 073/0602 COMMANDS 5 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1	TCP A SCI	TCP A SCI
154.7	2.1	3.4
152.9	2.7	4.3
-1.8	-0.6	-0.9
2217Z-0030Z 2 WAY		2158Z-2348Z CMDS XMITTED

PASS 0288 MAR 13,1972 MAR 13,1972 DAY 073 073  
-----  
DSS 41 A.O.S. 073/0136 L.O.S. 073/1010 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

0216Z-0955Z 2 WAY 0614Z CMDS XMITTED  
0606Z-0627Z 360 DOWN SOFTWARE/HARDWARE PROBLEMS DR 3288

PASS 0289 MAR 13,1972 MAR 13,1972 DAY 073 073  
-----  
DSS 62 A.O.S. 073/0917 L.O.S. 073/1821 COMMANDS 237 RANGING NIL

DEVIATIONS OR ANOMALIES

0955Z-1821Z 2 WAY 0945Z-1811Z 237 CMDS  
1123Z-1124Z HSD LOST DUE TO GODDARD C/P FAIL DR 5051  
1649Z-1656Z DIS HUNG UP AND RELOADED NO DR

PASS 0289 MAR 13,1972 MAR 14,1972 DAY 073 074  
-----  
DSS 14 A.O.S. 073/1710 L.O.S. 074/0601 COMMANDS 5 RANGING MU

DEVIATIONS OR ANOMALIES

TCP B SCI  
3.8  
4.4  
-0.6

1721Z DIS LOG WRITE ERRORS HIGH DUE TO PROB ENCOUNTERED DURING  
DATA XFER TEST NO DR  
2351Z-0008Z 360/75 DOWN 2260'S LOCKED OUT WARM RESTART DR 3294  
0151Z-0157Z 360/75 DOWN RESTART REQ DR 3296  
0307Z-0309Z 3100 DOWN STOPPED UPDATING RESTART DR 3297  
0333Z-0338Z 3100 DOWN STOPPED UPDATING RESTART REQ REF DR 3297  
2157Z-2345Z 2 WAY 2154Z-2340Z CMDS XMITTED

PASS 0289 MAR 14,1972 MAR 14,1972 DAY 074 074  
-----  
DSS 41 A.O.S. 074/0134 L.O.S. 074/1000 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY 0302Z-0733Z AND 0749Z-0755Z AND 0805Z-0919Z  
CMDS XMITTED 0545Z-0612Z  
0151Z-0157Z 360 DOWN RESTART REQ DR 3296  
0307Z-0309Z AND 0333Z-0338Z 3100 STOPPED UPDATING RESTART DR  
3297  
0428Z-0430Z HSD DOWN BETWEEN CANBERRA AND DSS-41 DR C-5055

PASS 0290 MAR 14,1972 MAR 14,1972 DAY 074 074  
-----  
DSS 62 A.O.S. 074/0916 L.O.S. 074/2137 COMMANDS 368 RANGING NIL

DEVIATIONS OR ANOMALIES

0922Z-0936Z 360 DOWN WARM/WARM DR 3301  
1621Z-1628Z 360 DOWN DUE TO BACKLOG WARM IPL DR 3296  
0955Z-2137Z 2 WAY

PASS 0290 MAR 14,1972 MAR 15,1972 DAY 074 075  
-----  
DSS 14 A.O.S. 074/1709 L.O.S. 075/0601 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B SCI  
3.4  
3.9  
-0.5

2103Z-2156Z DIS STOPPED UPDATING DR 0135  
0143Z-0156Z 360/75A DOWN DR 3307

PASS 0290 MAR 15,1972 MAR 15,1972 DAY 075 075  
-----  
DSS 41 A.O.S. 075/0132 L.O.S. 075/0953 COMMANDS 63 RANGING NIL

DEVIATIONS OR ANOMALIES

0245Z-0953Z 2 WAY 0230Z-0829Z CMDS XMIT  
0143Z-0456Z 360 DOWN IPL WARM DR 3307  
0240Z-0241Z HSD DOWN GSFC-JPL DR 5064  
0700Z-0706Z 360 DOWN WARM IPL DR 3308

PASS 0291 MAR 15,1972 MAR 15,1972 DAY 075 075  
-----  
DSS 62 A.O.S. 075/0913 L.O.S. 075/2245 COMMANDS 57 RANGING NIL

DEVIATIONS OR ANOMALIES

1710Z-1722Z 360 STRING SWAP A TO B DR 3311  
2131Z-2144Z 360/75 DOWN BACKLOG 2260'S OUT IPL DR 3312

PASS 0291 MAR 15,1972 MAR 16,1972 DAY 075 076  
-----  
DSS 14 A.O.S. 075/1707 L.O.S. 076/0600 COMMANDS 27 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B SCI  
4.3  
4.4  
-0.1  
1710Z-1722Z 360 SWAP DR 3311  
0437Z-0559Z 2 WAY 2300Z-0530Z CMDS XMITTED

PASS 0292 MAR 16,1972 MAR 16,1972 DAY 076 076  
-----  
DSS 62 A.O.S. 076/0912 L.O.S. 076/1820 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

0958Z-1743Z 2 WAY  
1046Z-1100Z 360/75 DOWN DUE ERRORS ON MSB PACK DR 3314

PASS 0292 MAR 16,1972 MAR 17,1972 DAY 076 077  
-----  
DSS 14 A.O.S. 076/1706 L.O.S. 077/0559 COMMANDS RANGING MU  
DSS 14 A.O.S. 076/1706 L.O.S. 077/0559 COMMANDS RANGING MU

DEVIATIONS OR ANOMALIES

2008Z DIS LOG TAPE HUNG UP. DIS TAKEN FOR REMAINDER  
OF TRACK IN AN ATTEMPT TO CORRECT PROBLEM.  
0219Z-0236Z 360/75B DOWN FOR IPL . REF DR N 3316

PASS 0292 MAR 17,1972 MAR 17,1972 DAY 077 077

DSS 42 A.O.S. 077/0544 L.O.S. 077/0915 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1-WAY PASS

PASS 0293 MAR 17,1972 MAR 17,1972 DAY 077 077

DSS 62 A.O.S. 077/0911 L.O.S. 077/1805 COMMANDS 5 RANGING NIL

DEVIATIONS OR ANOMALIES

1510Z-1526Z 360 DOWN WARM/WARM DR 3319

PASS 0293 MAR 17,1972 MAR 18,1972 DAY 077 078

DSS 14 A.O.S. 077/1703 L.O.S. 078/0558 COMMANDS 36 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B-SCI ACTUAL 2.6 PREDICTED 3.7 RESID -1.1  
DIS DOWN TO CORRECT LGWR PROBLEM. REF DR N-0135  
1932Z-1944Z 360/758 DOWN, ERRONEOUS T MED, ENTERED WARM  
IPL/RESTART, DR 3323  
2 WAY TRACK 1801Z-0558Z  
CMDS XMITTED 1800Z-0510Z

PASS 0293 MAR 18,1972 MAR 18,1972 DAY 078 078

DSS 42 A.O.S. 078/0520 L.O.S. 078/0915 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

NO P/RESIDS DUE TO 360 SOFTWARE PROBLEMS REF DR N-0140  
1 WAY PASS

PASS 0294 MAR 18,1972 MAR 18,1972 DAY 078 078

DSS 62 A.O.S. 078/0909 L.O.S. 078/1730 COMMANDS 186 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 0913Z-1730Z  
CMDS XMTD 1025Z-1715Z

PASS 0294 MAR 18,1972 MAR 19,1972 DAY 078 079

DSS 14 A.O.S. 078/1701 L.O.S. 079/0557 COMMANDS 18 RANGING MU

DEVIATIONS OR ANOMALIES

1707Z TCP-A PROGRAM BOMBED, RELOAD REQ., DR T-1938  
2241Z, 2255Z, 360/758 DOWN, 2260'S LOCKEDOUT, WARM IPL/RESTART  
DR 3326

PASS 0294 MAR 19,1972 MAR 19,1972 DAY 079 079  
-----  
DSS 42 A.O.S. 079/0540 L.O.S. 079/0918 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0802Z-0855Z 360/75B DOWN FOR STRING SWAP, UNABLE TO MAKE  
SWAP DR 3329  
NO PSEUDO-RESIDUALS DUE TO TDP 3-WAY CODE WHEN ACTUALLY 1-WAY  
TRACK  
1-WAY TRACK

PASS 0295 MAR 19,1972 MAR 19,1972 DAY 079 079  
-----  
DSS 62 A.O.S. 079/0911 L.O.S. 079/1730 COMMANDS 93 RANGING NIL

DEVIATIONS OR ANOMALIES

1108Z-1116Z 360/75B DOWN FOR STRING SWAP  
DR N-0141 ON D/L AND SNR RSID BELOW PRDX  
2 WAY TRK 0912Z-1730Z  
CMDS XMTD 0941Z-1725Z

PASS 0295 MAR 19,1972 MAR 20,1972 DAY 079 080  
-----  
DSS 14 A.O.S. 079/1659 L.O.S. 080/0556 COMMANDS 27 RANGING MU

DEVIATIONS OR ANOMALIES

1803Z-1820Z XMTR, FAILURE, TFR, B04548 AND DR T-1941 REFERS  
1853Z-0556Z 2 WAY  
1853Z-0530Z CMD XMITTED

PASS 0295 MAR 20,1972 MAR 20,1972 DAY 080 080  
-----  
DSS 42 A.O.S. 080/0539 L.O.S. 080/0915 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

NO PSEUDO/RESIDUALS DUE TO 3-WAY TDP CODE WHEN ACTUALLY 1 WAY

PASS 0296 MAR 20,1972 MAR 20,1972 DAY 080 080  
-----  
DSS 62 A.O.S. 080/0906 L.O.S. 080/1947 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

RELEASED EARLY, PROJECT CANX 2 WAY TRA SFER  
2 WAY TRACK 1910Z-1937Z  
CMDS XMTD 0942Z-1655Z

PASS 0296 MAR 20,1972 MAR 21,1972 DAY 080 081  
-----  
DSS 14 A.O.S. 080/1657 L.O.S. 081/0556 COMMANDS 22 RANGING NIL

DEVIATIONS OR ANOMALIES

1953-1959Z 360/75 A DOWN WARM RESTART DR 3333  
2314-2340Z 360/75 A DOWN CORE FRAG. WARM IPL RESTART DR 3333

0156-0202Z 360/75 A DOWN WARM RESTART DR 3337  
0440-0447Z 360/75 A DOWN RESTART REQUIRED DR 3338  
0522-0528Z 360/75 A DOWN RESTART REQUIRED DR 3339  
0554-0610Z 360/75 A DOWN RESTART AND IPL REQUIRED DR 3340  
2223-0556Z 2 WAY  
2234-0546Z COMMANDS XMITTED

PASS 0297 MAR 21,1972 MAR 21,1972 DAY 081 081

DSS 62 A.O.S. 081/0905 L.O.S. 081/2030 COMMANDS 59 RANGING NIL

DEVIATIONS OR ANOMALIES

1738Z-1750Z 360/75 DOWN. REASON UNKNOWN, NO DR.  
1807Z-1811Z, H50 TTY AND VOICE LINES DOWN, REF. DR 5130  
2 WAY TRACK 0908Z-2130Z, 0939Z-2104Z CMDS XMTD

PASS 0297 MAR 21,1972 MAR 22,1972 DAY 081 082

DSS 14 A.O.S. 081/1655 L.O.S. 082/0555 COMMANDS 57 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B SCI  
12.6  
13.8  
-1.2  
1738Z-1750Z 360/75A DOWN REASON UNKNOWN NO DR  
2255Z-2309Z 360/75A DOWN 2260'S LOCKED OUT WARM IPL  
RESTART, DR 3346  
0114Z-0130Z 360/75A DOWN, 2260'S LOCKED OUT, WARM IPL/  
RESTART DR 3348  
2248Z-0555Z 2 WAY  
2313Z-0545Z CMD XMITTED

PASS 0298 MAR 22,1972 MAR 22,1972 DAY 082 082

DSS 62 A.O.S. 082/0906 L.O.S. 082/2041 COMMANDS 364 RANGING NIL

DEVIATIONS OR ANOMALIES

0916Z-0948Z 360/75A DOWN, SYS BACKLOGGED, RESTART DR 3349  
\*RELEASED BY T/C AFTER 2 WAY XFER  
2 WAY TRACK 0907Z-2035Z  
CMDS XMTD 0941Z-2026Z

PASS 0298 MAR 22,1972 MAR 23,1972 DAY 082 083

DSS 14 A.O.S. 082/2030 L.O.S. 083/0555 COMMANDS 16 RANGING MU

DEVIATIONS OR ANOMALIES

\* TCP B-SCI  
ACTUAL 10.8  
PREDIC 11.9  
DIFFER -1.1

\*RANGING TURNED OFF AND ON  
LATE AOS DUE TO ECO ON 400KW XMTR, NO D/XFER TEST  
0013Z-0025Z 360A DOWN, DTV BACKLOG, 2260 LOCKOUT, WARM  
RESTART DR 3333  
0235Z-0252Z 360 A DOWN, OUT OF CORE, WARM RESTART DR 3354

PASS 0299 MAR 23,1972 MAR 23,1972 DAY 083 083  
-----  
DSS 62 A.O.S. 083/0902 L.O.S. 083/2220 COMMANDS 100 RANGING NIL

DEVIATIONS OR ANOMALIES

1450Z-1505Z 360/75A DOWN EARLY FOR SKED IPL WARM/WARM. SOFTWARE  
SOFTWARE PROBLEM ENCOUNTERED DR 3355  
2200Z EOT. HSDL RELEASED: MONITOR READINGS REFLECT 2100Z  
GROUND RECEIVERS GLITCHING IN RTS-1 MODE  
COMMAND/UPLINK ANONALY UNDER INVESTIGATION PER P/T

PASS 0299 MAR 23,1972 MAR 24,1972 DAY 083 084  
-----  
DSS 14 A.O.S. 083/1652 L.O.S. 084/0554 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0034Z-0051Z 360 A DOWN BACKLOG AND LOCKOUT RTJS DR 3358

PASS 0300 MAR 24,1972 MAR 24,1972 DAY 084 084  
-----  
DSS 62 A.O.S. 084/0902 L.O.S. 084/1932 COMMANDS 165 RANGING NIL

DEVIATIONS OR ANOMALIES

0939Z-1832Z 2 WAY  
1452Z-1822Z CMDS XMITTED

PASS 0300 MAR 24,1972 MAR 25,1972 DAY 084 085  
-----  
DSS 14 A.O.S. 084/1651 L.O.S. 085/0553 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

1820Z-ROL, TIMING GLITH ON M.E., DR N-0143 REFERS  
0348Z-0354Z 360 DOWN, COLD RESTART, DR 3366  
0536Z, XMTR OFF, ON AT 0538Z, COLLECTOR FLOW INTERLOCK, TFR  
801769, DR T-1955  
2 WAY TRACK 2225Z-0536Z  
CMDS XMTD 2229Z-0537Z

PASS 0301 MAR 25,1972 MAR 25,1972 DAY 085 085  
-----  
DSS 62 A.O.S. 085/1130 L.O.S. 085/1430 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

STA. HAD INTERMITTENT LOCK ONLY, DUE LOW GAIN ANT, NO DATA  
RECO.  
PROJ RELEASED STA. EARLY, UNABLE TO REC DATA.  
1127Z-1143Z 360/75A DOWN FOR SKED. STRING SWAP TO "B"

PASS 0301 MAR 25,1972 MAR 26,1972 DAY 085 086  
-----  
DSS 14 A.O.S. 085/1649 L.O.S. 086/0552 COMMANDS 13 RANGING MU

DEVIATIONS OR ANOMALIES

1810Z-1855Z DROPPED UPLINK MAG UNDERCURRENT PROB IN HEAT  
EXCHANGES DR T-1956  
0425Z-0438Z 360 "B" DOWN 2260 LOCKOUT WARM DR 3371

PASS 0302 MAR 26,1972 MAR 27,1972 DAY 086 087  
-----  
DSS 14 A.O.S. 086/1647 L.O.S. 087/0551 COMMANDS 168 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0303 MAR 27,1972 MAR 28,1972 DAY 087 088  
-----  
DSS 14 A.O.S. 087/1646 L.O.S. 088/0227 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

1826Z-1903Z STA LOST TIME SYST DR 7-1957  
DR T-1960 DELAY IN CMDING DUE TO EXCITER FAIL CAUSED BY  
SCH COMMERCIAL PWR OUTAGE  
DR T-1959 STA LEFT CMD MOD ON WITH TXR OFF  
DR T-1956 HIGH DOP RESID

PASS 0304 MAR 28,1972 MAR 28,1972 DAY 088 088  
-----  
DSS 62 A.O.S. 088/0853 L.O.S. 088/1755 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

1014Z-1021Z DIS DOWN, HUNG UP, RELOAD REQ, NO DR  
1036Z-1038Z ANTENNA EMERG. STOP, REASON UNKNOWN, REF.  
DR T-1961  
1010Z-1036Z; 1203Z-1755Z 2 WAY  
1203Z-1750Z CMD XMITTED

PASS 0304 MAR 28,1972 MAR 29,1972 DAY 088 089  
-----  
DSS 14 A.O.S. 088/1710 L.O.S. 089/0550 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

1930Z-1931Z DSS 14 TXR KICKED OFF RE: DR T 1995  
0234Z-0259Z 360 "A" DOWN, POWER FAILURE (COMPUTER) STRING  
SWAP TO "B" DR 3381

PASS 0305 MAR 29,1972 MAR 29,1972 DAY 089 089  
-----  
DSS 62 A.O.S. 089/1401 L.O.S. 089/2225 COMMANDS 90 RANGING NIL

DEVIATIONS OR ANOMALIES

1452Z-2225Z 2 WAY  
1452Z-2200Z CMD XMITTED

PASS 0305 MAR 29,1972 MAR 30,1972 DAY 089 090

DSS 14 A.O.S. 089/1646 L.O.S. 090/0549 COMMANDS 21 RANGING NIL

DEVIATIONS OR ANOMALIES

0041Z-0105Z 3100 DOWN, DUE TO 360/75B TIME OUTS  
0057Z-0105Z 360/75B DOWN, RE-IPL REF DR 3386  
2 WAY TRACK 2225Z-0335Z  
CMDS XMTD 0115Z-0125Z

PASS 0306 MAR 30,1972 MAR 30,1972 DAY 090 090

DSS 62 A.O.S. 090/1400 L.O.S. 090/2225 COMMANDS 171 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1459Z TO 2225  
CMD XMIT 1648Z-2159Z  
1938Z-1950Z 360 DOWN FOR RELOAD, REF DR 3354  
D/L AND SNR TO NEAR TH. TO BE VALID

PASS 0306 MAR 30,1972 MAR 31,1972 DAY 090 091

DSS 14 A.O.S. 090/1641 L.O.S. 091/0549 COMMANDS 36 RANGING NIL

DEVIATIONS OR ANOMALIES

\* VALUES ARE HIGH GAIN LOW GAIN  
0436Z-0455Z 400 KW XMTR PROBLEMS NO DR  
0230Z-0245Z 360/75 DOWN, LOCKED OUT, RE-IPL W/W REF 3393  
0230Z-0245Z 360/75 DOWN, LOCKED OUT, RE-IPL W/W REF DR 3393  
2 WAY TRACK 2258Z  
CMDS 2300Z-0530Z

## GLOSSARY

AOS	acquisition of signal	IRR	infrared radiometer
BDA	Block Decoder Assembly	JPL	Jet Propulsion Laboratory
BFS	B frame start	KA	cone angle
CA	clock angle	LOS	loss of signal
CC	coded command	MDR	master data record
CC&S	central computer and sequencer	MM'71	Mariner Mars 1971
CCTV	closed-circuit television	MOI	Mars orbit insertion
CME	celestial mechanics experiment	N	nadir
CP	Communications Processor	N/A	not applicable; not available
CPS	Central Processing System	NASA	National Aeronautics and Space Administration
DC	direct command	NAT	Network Analysis Team
DIS	Digital Instrumentation Subsystem	ODR	original data record
DL	downlink	PET	probe ephemeris tape
DOY	day of year	PLBK	playback
DR	discrepancy report	PTT	project tracking tape
DSN	Deep Space Network	QC	quantitative command
DSS	Deep Space Station	RF	radio frequency
DSS 12	Echo Deep Space Station, Goldstone, California	S/C	spacecraft
DSS 14	Mars Deep Space Station, Goldstone, California	SCT	SFOF Communications Terminal
DSS 41	Woomera Deep Space Station, Island Lagoon, Australia	SDR	System Data Record
DSS 42	Weemala Deep Space Station, Canberra, Australia	SFOF	Space Flight Operations Facility
DSS 51	Johannesburg Deep Space Station, Johannesburg, South Africa	SNR	signal-to-noise ratio
DSS 62	Cebertos Deep Space Station, Madrid, Spain	SSA	Symbol Synchronization Assembly
DTS	Digital Tracking Subsystem	TCP	Telemetry and Command Processor
DTV	digital television	TDA	tracking and data acquisition
ECO	engineering change order	TDH	Tracking Data Handling Subsystem
FS	fast slew	TDS	Tracking and Data System
GCF	Ground Communications Facility	TSF	tracking synthesizer frequency
GMT	Greenwich Mean Time (Zulu time)	TTY	teletype
HGA	high-gain antenna	TV	television
HSD	high-speed data	UL	uplink
HSDL	high-speed data line	UVBL	ultraviolet bright limb
I/O	input/output	UVPM	ultraviolet pressure mapping
IPL	initial program load	UVS	ultraviolet spectrometer
IRIS	infrared interferometer spectrometer	VCO	voltage-controlled oscillator
		VSF	variable surface features
		XMIT	transmit
		Z	zenith; zulu time (GMT)